The Industry Analysis Division's

Reference Book

of
Rates
Price Indices
and
Household Expenditures
for Telephone Service

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Executive Summary

Rates for Local Service

- The average rate paid by residential customers for unlimited local touch-tone calling rose to \$19.98 in 1995. This represents an increase of less than 1% over the average rate in 1994. Charges for connection of a residential phone line fell by 0.5% in 1995.
- Lifeline service, a program subsidizing monthly phone charges for low-income households, was available in 73% of the cities sampled. In 1995, the average monthly benefit to participants was \$9.06. Link-up, which subsidizes charges for the connection of a phone line, was available in 96% of the cities sampled. The average benefit for the connection of phone service was \$26.66.
- The average rate paid by business customers for a single phone line rose from \$41.64 in 1994 to \$41.77 in 1995. Charges for connection of a single business phone line fell by 3% to \$72.32 in 1995. Charges for multi-line service and connection exhibited similar patterns.

Rates for Toll Service

- AT&T, MCI, and Sprint raised basic schedule interstate toll rates for residential customers twice in 1996. The Consumer Price Index for interstate toll calls rose by 3.7% in 1996, while the index for intrastate toll calls rose by 6.1%.
- Interexchange carriers continue to offer discount and promotional programs to residential customers. For a consumer spending \$10-\$15 per month, the savings over the course of a year can amount to \$25-\$40. High-volume callers can see substantial savings in their long-distance bills as a result of these discounts.
- Since 1995, Sprint has offered a calling plan with rates that are dependent only on the time-of-day the call is placed. In 1996, AT&T and MCI introduced similar flatrate domestic calling plans to the residential market. The rates on these calling plans, in addition to being distance-independent, do not vary by time-of-day. Lowvolume callers may see substantial savings by switching to a flat-rate calling plan.
- Resellers, aggregators, and dial-around carriers continue to offer competitive rates to consumers willing to shop around.

Consumer Expenditures for Telephone Service

- Monthly expenditures on telephone service in those households with telephone service rose by 5% to \$61 in 1994. Telephone service continues to comprise about 2% of household expenditures.
- Urban households continue to spend more on telephone service than do rural households.
- Black households spend more on telephone service than do non-black households.
- Monthly expenditures on telephone service are highest in the western region of the U.S.

INTRODUCTION

This report presents information compiled by the Bureau of Labor Statistics (BLS), the Bureau of Economic Analysis (BEA), the Rural Utilities Service (RUS), the Bureau of the Census, and the FCC's Common Carrier Bureau Industry Analysis Division. The report contains historical data, background material and descriptions of methodology. It is intended to assist in the analysis and interpretation of telephone price and expenditure trends.

Section 1 describes the BLS telephone price index series, and shows year-to-year index changes to the present. Telephone prices rose rapidly in the early 1980s, following a major rise in inflation in the overall economy. In 1984, the FCC implemented access charge policies which shifted the recovery of some costs from interstate toll rates to subscriber line charges. The indices show interstate rates falling after 1984, and local rates rising. These trends are shown in Table 1 and Figures 1 through 4. Section 1 also presents a long term comparison of telephone rates and overall inflation.

Section 2 describes the local rate survey conducted by the Industry Analysis Division and presents rate averages for the local services used by ordinary residential customers. Table 2 presents detailed estimates of charges to residential customers. As of October 1995, residential customers paid an average of \$13.62 for a single party access line. This amount was higher than the revised average for October 1994 of \$13.28, and \$1.06 higher than the average from October 1986. Including subscriber line charges, touch-tone service, and taxes, the average monthly bill was \$19.98. The section also discusses information on extended area charges, connection charges, and inside wiring maintenance plans.

Section 3 describes the survey of local business rates conducted by the Industry Analysis Division. Table 3 presents rates charged to three types of business customers — a single line business, a small business with a key system, and a larger business with a PBX system. Business customers pay significantly higher local rates than do residential customers. In October 1995, single line business customers paid an average of \$41.77 for local service, including touch-tone service, subscriber line charges, and taxes. PBX trunks cost an average of \$53.22. These averages include 200 calls per line per month in areas where business customers are required to take measured or message rate service. Section 3 also presents information on measured service rates, inside wiring charges for single line business customers, and connection charges.

Section 4 presents data on lifeline and Link-Up rates. Table 4 compares averages for generally available rates with averages for subsidized rates. On average, customers who qualify for lifeline service save about \$9 per month. Customers who qualify for connection assistance have their connection charges reduced by more than \$26. Out of 95 sample cities, carriers in 70 cities had lifeline programs, and in 90 cities had Link-Up programs.

Section 5 provides data on rural telephone service. Table 5 summarizes rate levels in Wisconsin, which had relatively comprehensive historical data covering many small rural carriers. The Wisconsin data show the relationship between rural rates and urban rates in the state. In addition the Wisconsin data show that rural rate increases have been similar to changes in rates nationally, and that the number of very small exchanges has been shrinking. Table 7 presents Rural Utilities Service data on average revenue per rural subscriber. These data, along with Figure 11 and Figure 12, show that rural rate changes have been comparable to nationwide changes. Figure 13 illustrates the great increases in toll service expenditures by rural subscribers. Rate levels for RUS borrowers in 1994 are also examined. The data show that rural local service rates appear to be about \$2.50 below those of urban areas.

Section 6 describes data on expenditures for telephone service. The Bureau of Labor Statistics' Consumer Expenditure Survey supplies the most detailed information on telephone expenditures by households. Table 8 shows total telephone expenditure levels for all households, and for many demographic breakdowns, such as urban customers versus rural customers. In 1994, the average household spent \$690 for telephone service, representing about 2.2% of all household expenditures. Households with incomes in the top 20% spent over twice as much for telephone service as households in the bottom 20%. Low income households, however, devoted twice as much of their overall expenditures to telephone service.

Table 9 presents estimates of monthly telephone expenditures for households with telephone service. By removing the cost of basic local service, the table provides an estimate of household expenditures for toll and other services. Each of the demographic groups shown in the table have significant toll expenditures. Figure 15 tracks expenditure increases by several demographic groups, and suggests that toll usage has grown rapidly for many segments of society.

Household expenditure data are also available from the Bureau of Economic Analysis and the Census of Communications Firms. Figure 16 shows telephone consumption expenditures as a percentage of personal consumption expenditures (PCE). The percentage rose steadily from the end of World War II until 1975. Rates for basic local service rose most rapidly between 1975 and 1985. The percentage of PCE for telephone service actually fell during that period, because inflation in the overall economy overshadowed increases in telephone rates.

Table 11 shows household expenditure data for 26 cities. These data are used to show that much of the difference in telephone expenditures is due to differences in average household incomes. Differences in local rate levels explain relatively little of the city-to-city differences in household telephone expenditures.

Section 7 reviews changes in local rates. Table 12 presents selected rate averages for 1983 to the present. Figure 18 shows how the components of the residential charge have changed over time. The base rate has remained about the same since 1985.

Increases since 1985 primarily have resulted from subscriber line charges and increased taxes. Figures 19 through 22 show that changes in the survey rate averages are fairly consistent with changes in published telephone service price indices. This suggests that the 95 city averages are reliable indicators of local rate changes over time. Section 7 also presents AT&T estimates of residential rate averages for 1940 through 1983. Since 1970, the cost of local residential service has risen less than the overall rate of inflation.

Section 8 reviews long term changes in toll rates. It is based on the basic schedule of charges paid by residential customers and excludes business services such as 800 calling, private networking, and special access. Table 13 shows selected AT&T interstate toll rates from 1927 to the present. Figure 23 shows the charge for ten-minute day-time short haul, middle distance, and coast-to-coast calls. In 1930, a coast-to-coast call cost more than 100 times as much as a short distance interstate call. Today, the charges are nearly equal. Figure 24 presents the same rates as Figure 23, expressed in today's dollars. This graph shows how the real cost of medium distance and long haul calls have continuously fallen since 1935. The cost of the shortest haul calls have varied, but are not significantly higher than they were in 1935 after adjusting for inflation. Because many customers participate in calling plans, and therefore do not pay the basic schedule rates, we briefly examine some of the trends in discount calling plans.

This publication also contains several appendices. Appendix 1 contains selected monthly CPI and PPI index levels from 1972 to the present. Appendix 2 contains selected residential rate information for the 95 sample cities as of October 1995. The data include the monthly charge for unlimited service, the connection charge and comparable subsidized rates. The appendix also shows touch-tone and inside wiring maintenance plan charges. Appendix 3 contains business rate information for the same 95 cities. The data include the monthly line charges for local business service for single line, key system, and PBX customers. Appendix 4 shows monthly charges and connections charges for residential service by city for 1983 through 1995.

Appendix 5 compares local rate averages by company with revenue data from the Statistics of Communications Common Carriers. Table A5-1 shows monthly local and toll service revenues per access line. Figure 34 shows that the 95 city averages are fairly consistent with the revenue per access line data.

Appendix 6 contains long term series of rate levels, price indices, and consumer expenditures for telephone service. Appendix 7 contains technical notes on the telephone service price indices produced by the Bureau of Labor Statistics. Appendix 7 also highlights differences between the CPI and PPI indices.

Appendix 8 contains data on expenditures for communications services by sector of the economy. Based on the 1987 benchmark Census of Manufacturers, businesses spent less than one cent for communications service for each dollar of final revenue. This appendix also shows telephone industry purchases from other sectors of the economy.

Appendix 9 documents the basic rate schedules for interstate toll calls charged by AT&T, MCI, and Sprint since 1980.

This report contains current BLS and BEA data. In some cases published data are slightly different from previously published figures. Similarly, the local rate averages for prior periods reflect some revisions. The statistical data presented in this report summarize information collected by the FCC's Industry Analysis Division. The data contained in this report can be obtained from the FCC - State Link computer bulletin board at (202) 418-0241 or through the FCC-State Link on the Internet, accessible from the Common Carrier Bureau's Home Page at http://www.fcc.gov/ccb/. Copies of the report may be purchased by calling International Transcription Services (ITS) at (202) 857-3800.

1. PRICE INDEX DATA

The U.S. Department of Labor's Bureau of Labor Statistics (BLS) calculates telephone service price indices as part of two major programs. Its Consumer Price Index (CPI) program publishes indices based on the amount of money that residential customers in urban areas pay for telephone service. The Producer Price Index (PPI) program publishes indices based on the amount of money that companies receive for providing telephone service. Unlike the CPI, the PPI indices cover business as well as residential telephone service. Appendix 1 contains monthly values for the telephone service indices. The CPI and PPI telephone price indices are described in greater detail in Appendix 7.

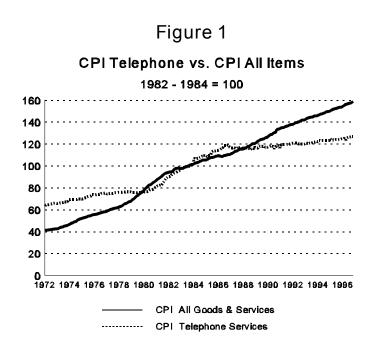


Table 1 shows recent annual percent changes for the indices shown in Appendix 1. The CPI for all items, which reflects overall inflation for consumers. and selected telephone service price indices are shown in the first three figures. Figure 1 compares the CPI for all items with the CPI for all telephone services. Changes in telephone service prices have traditionally lagged changes in overall inflation. This accounts for the relatively steady level telephone prices in the late 1970s and the relatively high increases from 1980 to 1985. On the whole, telephone prices have increased by less than the overall level of

inflation during the last eight years.

The PPI values contained herein are from the 1972 to 1995 indices. BLS revised the PPI telephone methodology and samples in July 1995. The BLS began publishing a new series of telephone indices which are structured and calculated differently than the 1972 - 1995 series.

TABLE 1-A

CONSUMER PRICE INDICES (1980 - 1996)
% Change December of Previous Year Through December of the Year Shown

	All Goods & Services	Telephone Services	Local Services	Interstate Toll Service	Intrastate Toll Service
1980	12.5%	4.6%	7.0%	3.4%	-0.6%
1981	8.9%	11.7%	12.6%	14.6%	6.2%
1982	3.8%	7.2%	10.8%	2.6%	4.2%
1983	3.8%	3.6%	3.1%	1.5%	7.4%
1984	3.9%	9.2%	17.2%	-4.3%	3.6%
1985	3.8%	4.7%	8.9%	-3.7%	0.6%
1986	1.1%	2.7%	7.1%	-9.4%	0.3%
1987	4.4%	-1.3%	3.3%	-12.4%	-3.0%
1988	4.4%	1.3%	4.5%	-4.2%	-4.2%
1989	4.6%	-0.3%	0.6%	-1.3%	-2.6%
1990	6.1%	-0.4%	1.0%	-3.7%	-2.2%
1991	3.1%	3.5%	5.1%	1.3%	-1.5%
1992	2.9%	-0.3%	0.5%	-1.3%	-2.4%
1993	2.7%	1.8%	1.0%	6.5%	0.2%
1994	2.7%	0.7%	-0.3%	5.4%	-1.0%
1995	2.5%	1.2%	2.6%	0.1%	-3.8%
1996	3.6%	2.1%	0.9%	3.7%	6.1%

TABLE 1-B
PRODUCER PRICE INDICES (1980 - 1994)
% Change December of Previous Year Through December of the Year Shown

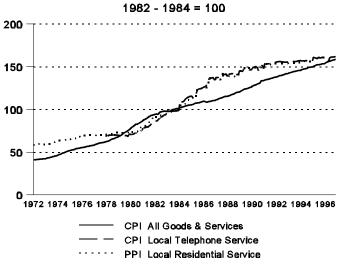
	Local Services	Local Residential Services	Local Business Services	Toll Service	Intrastate MTS	Interstate MTS	International MTS
1980	5.5%	7.1%	5.8%	4.1%	2.3%	5.5%	5.3%
1981	13.5%	15.6%	15.7%	10.8%	8.0%	15.9%	-13.2%
1982	7.5%	9.0%	5.8%	3.8%	1.7%	3.9%	10.5%
1983	1.5%	0.2%	2.2%	1.6%	3.9%	0.0%	0.4%
1984	13.8%	10.4%	24.1%	-1.6%	3.8%	-5.1%	-6.4%
1985	9.2%	12.4%	5.6%	-0.8%	2.1%	-3.0%	-0.3%
1986	5.9%	8.9%	2.5%	-7.0%	-3.5%	-10.1%	-2.8%
1987	1.2%	2.6%	-0.8%	-7.9%	-3.0%	-11.8%	-0.4%
1988	3.2%	4.6%	0.5%	-2.3%	-3.8%	-2.1%	0.0%
1989	1.3%	1.9%	0.6%	-0.8%	0.5%	-1.7%	0.0%
1990	0.9%	1.5%	0.0%	-1.1%	-2.2%	-0.1%	-0.5%
1991	1.3%	2.1%	0.0%	-1.8%	-2.6%	-1.3%	0.2%
1992	-0.2%	-0.2%	-0.2%	1.0%	1.3%	1.0%	0.0%
1993	1.0%	0.8%	2.3%	0.8%	-1.1%	3.8%	-17.9%
1994	0.5%	0.7%	-0.2%	2.3%	-1.4%	6.1%	0.0%

TABLE 1-C SELECTED PRODUCER PRICE INDICES ¹ % Change from December 1995 to December 1996								
Telephone Communications, except Radiotelephone		0.0%						
Local Service, except Private Lines		0.4%						
Residence Local Service		Coin Local Service	1.4%					
Business Local Service	0.3%	Directory Assistance	0.0%					
Public Switched Toll Service		-0.2%						
Residence Switched Toll Service		0.5%						
Intrastate Residence Switched Toll Service	-0.2%	International Residence Switched Toll Service	-17.9%					
Interstate Residence Switched Toll Service	6.1%							
Business Switched Toll Service		-1.2%						
Business Switched Access Toll Service	-0.1%	Business Special Access Switched Toll Service, except Private Lines	-3.0%					
Outbound Business Switched Access Toll Service	-0.8%	Outbound Business Special Access Switched Toll Service	-4.3%					
Intrastate Business Switched Access Toll Service, Outbound	1.9%	Intrastate Business Special Access Switched Toll Service, Outbound	9.7%					
Interstate Business Switched Access Toll Service, Outbound	0.0%	Interstate Business Special Access Switched Toll Service, Outbound	-6.0%					
International Business Switched Access Toll Service, Outbound	-12.4%	International Business Special Access Switched Toll Service, Outbound	-11.6%					
Inbound Business Switched Access Toll Service	0.9%	Inbound Business Special Access Switched Toll Service	-0.7%					
Intrastate Business Switched Access Toll Service, Inbound	-8.2%	Intrastate Business Special Access Switched Toll Service, Inbound	8.9%					
Interstate Business Switched Access Toll Service, Inbound	-0.7%	Interstate Business Special Access Switched Toll Service, Inbound	0.4%					
International Business Switched Access Toll Service, Inbound	-9.9%	International Business Special Access Switched Toll Service, Inbound	-0.2%					
Private Line Service		0.4%						
Intrastate Private Line Service	1.2%	LEC Intrastate Private Line Service	1.3%					
Directory Advertising		0.1%						

 $^{^{\}scriptscriptstyle 1}\,$ BLS revised the PPI telephone methodology and sample in June 1995.

Figure 2

CPI All Items vs CPI & PPI Local Service



indices for local residential The largest telephone service. increases after divestiture are due the federal subscriber line charges. The series should show differences over time, because the CPL inside covers maintenance and customer premises equipment. In addition, samples cover different geographic areas. Appendix 7 discusses the many differences between the CPI and PPI telephone service price indices.

Figure 2 shows the CPI for all

items, and the CPI and PPI price

Figure 3

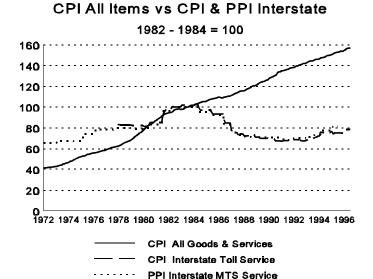


Figure 3 shows the CPI and PPI for interstate message telephone service (MTS). Figure 4 shows the CPI and PPI intrastate MTS indices. As with the graph for local service, the impact of federal subscriber line charges is apparent in price indices for interstate MTS service. The imposition of subscriber line charges resulted in lower access charges to interexchange carriers. This in turn led to steep decreases in interstate MTS rates between 1984 and 1988.

Figure 4

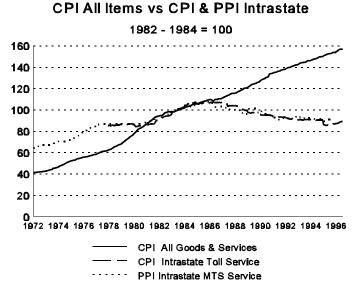


Figure 3 and Figure 4 show the CPI and PPI toll indices moving in concert. Until July 1993, many business customers continued to take service at the same rates charged to residential customers. Business customers tend to make shorter distance calls and tend to make a higher percentage of day calls.

Several changes have occurred in the toll industry. Specialized services, such as 800 service and Megacom, have attracted an increasing share of switched traffic. The CPI does not cover these services, and the discontinued PPI sample was based on usage patterns

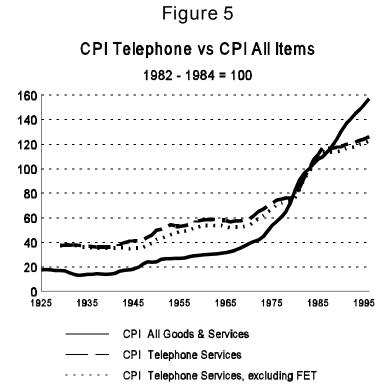
from the late 1970s. The revised PPI indices should provide a reasonable indication of pricing trends for these specialized services. Another change has been the rapid growth of international service. International service represented about 7% of billed long distance revenues in 1984, and represents more than 14% today. The CPI sample does not include international rates. In contrast to the practice followed for many years, AT&T, MCI and Sprint now have different basic MTS rate schedules for business and residential customers. Finally, since 1992, AT&T and other carriers have increased basic schedule rates at the same time that they have increased discount offerings to many customers. These changes mean that the MTS indices, which principally measure changes in domestic basic schedule rates, are not as representative of overall rate changes as they were before 1992.

The CPI toll indices did not fully reflect the increased use of discount plans in the past. Since 1994, BLS has taken steps to more accurately reflect their usage. As a consequence, the CPI interstate price index may overstate changes since 1992. For example, the CPI interstate toll index shows domestic rates increasing 7.5% between December 1992 and May 1995. AT&T's "actual price index" (API) for residential services, which AT&T submitted with tariff filings, showed interstate residential rates decreasing by 3.9% over the same period. AT&T's API assumes that all callers are participating in a discount calling plan, thereby providing an estimate of the upper bound on the effects of discount plans on the CPI. Unlike the CPI, AT&T's APIs also include international rates. In addition, the CPI price samples are weighted using historic usage levels. In contrast, using data from AT&T tariff filings, AT&T's API averages in discounts at usage levels forecast for some future point in time. If these discounts are excluded from the API calculations, AT&T's price index would show an increase of over 13% during the period. Since the introduction of True Rewards and True USA Savings in December, 1993, there

has been an increase in the number of promotional and discount offerings. The increase in these offerings results in projected prices being lower, thus AT&T's API is lower. However, the actual price ultimately paid by the customer depends on whether or not they take advantage of the plans offered.

The discontinued PPI international index measured changes in carrier revenue per unit of service, rather than changes in rates paid by customers. Table 1B shows that the discontinued PPI for international MTS dropped 18% in 1993, but did not change in 1994. Base rates for international MTS increased during 1993 and accounting rates fell. These changes, however, were offset by the drop in the value of the dollar. Changes in the value of the dollar change the actual dollar payouts from U.S. carriers to foreign carriers. As Table 1C shows, July 1995 to July 1996 changes in the revised PPI measures of international rates indicate that downward pressure on international rates has continued.

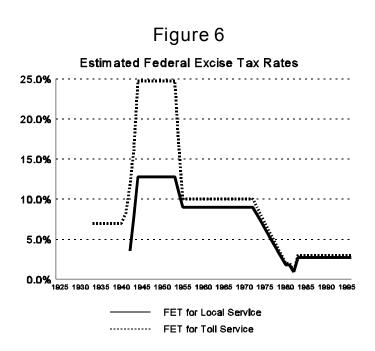
Local telephone rates rose at a similar pace in 1990 and 1991. Published CPI index levels, however, reflect an \$8.72 per access line credit for Southwestern Bell customers in Texas in December 1990. This appears to have caused the local service and the overall telephone service indices to drop significantly in December 1990. Since the credit applied to one month only, the indices returned to their previous level in January 1991. As a result, the percent changes from the prior December shown in Table 1 understates the local service and overall rate increases for 1990, and overstates them for 1991.



The Bureau of Labor **Statistics** began publishing a consumer price index (CPI) for telephone service in 1935. Telephone service prices were included in the overall CPI prior to 1935, but the Bureau of Labor Statistics did not publish a separate telephone service price index. The same pricing data, however, was used in developing national income account statistics. The Bureau of Economic Analysis published a Gross National Product fixed weight price index (GNP-PI) for personal consumption expenditures telephone service. The year-toyear changes in the GNP-PI telephone index are virtually the same as the year-to-year changes in the CPI telephone index for 1935 to the present. Accordingly, the

year-to-year changes in the GNP-PI telephone index were used to extend the CPI telephone index back to 1929. The extended index is shown in Figure 5, and shows that over the whole period, the cost of telephone service has risen less than overall inflation. The data for the extended series are contained in Appendix 6.

The consumer price index measures the cost of telephone service to residential customers. Accordingly, the index measures changes in telephone service tax rates as well as changes in telephone rates. Nationwide, the federal excise tax (FET) on telephone service is the most significant tax on telephone services provided to residential customers. While the FET rate is currently 3 percent, the rate has changed significantly over time. Its impact is felt even more in those locales with high tax rates, as the FET is levied on all telephone charges including other taxes.



Congress enacted the first FET for communications in 1914. At that time, the FET was assessed as a tax of one cent on toll telephone calls and telegraph messages costing over 15 cents. The tax was repealed in 1916, reinstated in 1918, repealed again in 1924, and reinstated again in 1932. Rates rose in the 1930s and then increased dramatically during World War II. By 1943 the tax rate rose to 25% on all messages costing over \$.24 and 15% on local service charges. The tax was reduced to a flat 10% tax in 1954. The rate was gradually reduced to 1% between 1972 and 1982 and then raised to 3% in 1983, where it remains. Figure 6 illustrates the changes in federal excise taxes over time.

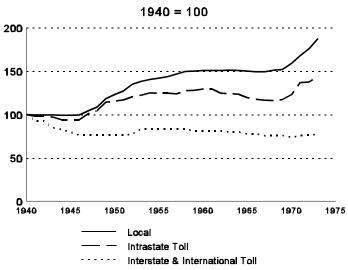
Appendix 6 contains estimated FET rates for 1932 to the present. For 1929 through 1953, the rates were estimated by dividing FET collections by revenues, with the results averaged for periods with the same tax rates. The statutory rates are shown for 1954 to the present, with the local rate reduced by 10% to reflect the tax exemption for connection charges and for some classes of customers. The local and toll tax rates were combined by using revenue data. The resulting index was used to create an adjusted CPI telephone service index. Figure 5 shows how the CPI for telephone service would have been different if the FET had been excluded from the telephone index.

AT&T price indices for local, intrastate, and interstate service are available for the period 1940 through 1973. These indices cover both business and residential rates.

Figure 7

AT&T Rate Index

1940 = 100

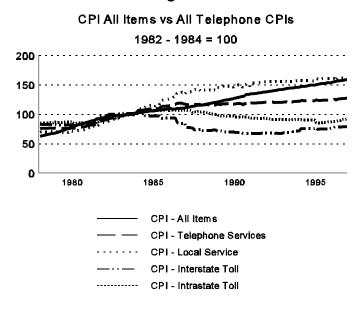


AT&T calculated the indices by chaining the estimated annualized revenue impact of rate changes. For each year, AT&T estimated a base revenue by adjusting actual revenues by the effective amount of rate changes for the year. The base revenue represented the amount of revenue they would have collected if rates on January 1 had remained in effect for the whole year. AT&T then estimated the amount of revenue change that would have rsulted if the new rates had been in effect for the whole year. These revenue changes

were divided by the base revenues to estimate the percentage change in rates for the year. The percentage changes were linked together to create the indices. This methodology differs from the Laspeyre's fixed weight approach used to construct the CPI and PPI indices.

Appendix 6 contains the AT&T indices and Figure 7 shows these indices. The AT&T indices show local rates rising 88% between 1940 and 1973. Intrastate toll rates rose by 45% and interstate rates fell by 22% over this period. The interstate index includes international service, which accounted for about 5% of the toll market in 1973. The CPI Telephone Service index rose by about 74% between 1940 and 1973.

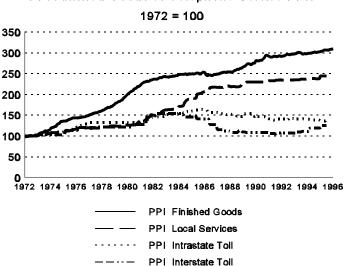
Figure 8



Since divestiture, consumer expenditures on local telephone service, as measured by the CPI have increased at a slightly faster rate than overall inflation, as shown Figure 8. However. differencehas been declining over the past few years. During the seven year period before the divestiture local service prices also increased. The patterns for interstate and intrastate toll service are different. Before divestiture both however. were growing faster than inflation, while after, these have both been outpaced by inflation. Although they changed over time, prices are near the same levels they were in 1977. Other figures showing CPI and PPI values compared to each other were presented in Figures 1 through 5.

Corresponding to the increased consumer expenditures for local telephone service there has also been an increase in revenues per unit of production from local service as





measured by the producer price index. Figure 9 shows much the same pattern as the CPI indices in Figure 8; the PPI for local services has risen faster than the overall PPI for finished goods, while Interstate and Intrastate toll have been below the overall PPI.

Appendix 6 contains indices that have been created by linking the AT&T rate change indices (1940 - 1972) to corresponding producer price indices (1972 - present). The following weights were used to combine year-to-year percentage changes in the linked indices and thus create the AT&T-PPI composite telephone service rate index.

	Local	Intrastate	Interstate
1940 - 1959	0.75	0.11	0.14
1960 - 1969	0.65	0.15	0.20
1980 - present	0.55	0.19	0.26

Figure 10

CPI Telephone vs AT&T-PPI Composite

140

120

100

80

60

40

20

1940

1950

1960

1970

1980

1990

1994

CPI Telephone Service

AT&T-PPI Composite Index

Figure 10 compares the AT&T-PPI composite index for 1940 to 1994 with the CPI Telephone Service index. Overall, the CPI Telephone Service index increased about 0.3% per year faster than has the composite index. The CPI Telephone Service index does not cover international rates, which have fallen significantly since 1940. Differences in the indexing method may also explain some of the 0.3% per vear difference. It is also possible that the rates for business services have fallen

more rapidly than the rates for residential services. The year-to-year percentage changes in the two series are highly correlated. In sum, it appears that the linked local, intrastate, and interstate indices are reasonably good indicators of rate changes from 1940 to 1994.

2. RESIDENTIAL RATES FOR LOCAL SERVICE

Local residential rates were collected for 95 cities for October 15, 1995. The 95 city sample was selected from the sample areas used by the Bureau of Labor Statistics as part of the CPI program in 1986. The survey sample includes the largest city in each of the CPI sample areas, and 11 additional cities. Rates were provided by telephone company tariff and rate specialists. Calls to telephone company service representatives were used to verify carrier provided data. Weighted national averages were calculated using the CPI weights for each sample area.

Table 2 presents nationwide averages for October 15, 1986 through October 15, 1995. As of October 15, 1995, the average monthly charge for private line (i.e. one party) service with unlimited local calling (i.e. "flat rate" service) was \$13.62. This amount includes surcharges and credits that are accounted as local service revenue. Local exchange customers must also pay federal and state subscriber line charges (SLCs) and taxes. Including SLCs and taxes, the average charge for rotary, unlimited private line service was \$19.49. The total monthly charge for unlimited private line service ranged from \$11.96 in Phillipsburg, New Jersey to \$30.88 in Buffalo, New York. The total charges for unlimited calling by city are contained in Appendix 2. Detailed data can be obtained through the FCC-State Link, a computer bulletin board maintained by the Industry Analysis Division (202-418-0241) or through the FCC-State Link on the Internet, accessible from the Common Carrier Bureau's Home Page at http://www.fcc.gov/ccb/.

Residential customers in four sample cities -- New York City, Chicago, Milwaukee, and Racine, Wisconsin -- are not offered a local service option that includes unlimited local calls. The nationwide average rate for unlimited calling was calculated by using the measured service rates for these cities, and includes the cost of 100 five minute calls. Ameritech reported that residential customers in Wisconsin made about 130 local calls per month in 1992. Customers in Huntington, West Virginia have a hybrid service, with unlimited calling within their home exchange plus a handful of surrounding exchanges, and measured rate service within an extended local calling area. The rate for the service most commonly chosen by customers in Huntington is \$22 plus taxes and surcharges. The unlimited calling rate average would have been \$0.82 higher in October 1995 if 50 additional local calls had been included in New York City, Chicago, Milwaukee, Racine, and Huntington.

The average monthly charge for a private line with unlimited calling rose a little less than 2.5 percent between October 1994 and October 1995. The only significant increase in local service tariff rates since 1986 occurred during the period from October 1990 to October 1991, when the average rose 5%. Two items accounted for more than two thirds of this increase. The first factor is that the cost of local service rose about 14% in New York State. New York State accounts for about 13% of the sample weight. The second factor underlying local rate changes in the 1990's has been that some local rates have increased to offset decreases in touch-tone charges. The nationwide average monthly charge for touch-tone service decreased from \$1.47 in October 1990 to \$1.17 in October

Table 2 National Averages for Local Residential Rates ²										
				Rat	es as of	October	15			
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Unlimited local calling	12.58	12.44	12.32	12.30	12.39	13.10	13.12	13.22	13.28	13.62
Federal and state SLCs	2.04	2.66	2.67	3.53	3.55	3.56	3.55	3.55	3.55	3.54
Taxes and 911 charges	1.51	1.56	1.58	1.70	1.85	2.00	2.03	2.17	2.24	2.34
Total for rotary service	16.13	16.66	16.57	17.53	17.79	18.66	18.70	18.94	19.07	19.49
Additional monthly charge for touch-tone service (including tax)	1.57	1.52	1.54	1.52	1.47	1.17	1.08	1.04	0.74	0.49
Total for touch-tone service	17.70	18.18	18.11	19.05	19.26	19.83	19.78	19.98	19.81	19.98
	ı									
Lowest generally available monthly rate	5.96	5.81	5.67	5.67	5.68	6.18	6.22	6.43	6.47	6.68
Federal and state SLCs	2.04	2.66	2.67	3.53	3.55	3.56	3.55	3.55	3.55	3.54
Taxes and 911 charges	0.84	0.94	0.91	1.03	1.15	1.28	1.31	1.45	1.50	1.56
Total for rotary service	8.84	9.41	9.25	10.23	10.38	11.02	11.08	11.43	11.52	11.79
W 6 W 1 W	T									
# of cities in the sample offering measured service	n.a.	76	77	79	82	85	86	86	87	88
Monthly cost including 50 five-minute daytime calls	n.a.	8.57	8.47	8.48	8.52	8.94	9.32	9.63	9.61	9.82
Federal and state SLCs	n.a.	2.69	2.67	3.53	3.55	3.56	3.55	3.55	3.55	3.51
Taxes and 911 charges	n.a.	1.25	1.21	1.37	1.50	1.60	1.67	1.82	1.86	1.93
Total for rotary service	n.a.	12.51	12.35	13.38	13.57	14.10	14.54	15.00	15.02	15.25
51st five-minute call	n.a.	0.092	0.090	0.090	0.090	0.088	0.088	0.089	0.088	0.088
	T									
Lowest cost inside wiring maintenance plan	0.58	0.85	0.89	1.07	1.07	1.20	1.25	1.31	1.41	1.52
Monthly charge for optional extended area service	n.a.	n.a.	0.96	0.98	1.01	1.02	0.88	0.93	0.94	0.97
Dania annuarità di tra	45.00	44.04	40.04	40.74	40.00	40.00	44.50	44.00	44.00	40.04
Basic connection charge Taxes	45.63 2.28	44.04 2.20	42.94 2.11	42.71 2.24	43.06 2.32	42.00 2.19	41.52 2.18	41.38 2.21	41.26 2.27	40.91 2.42
Total for rotary service	47.91	46.24	45.05	44.95	45.38	44.19	43.70	43.59	43.53	43.33
Additional connection charge for touch-tone service (including taxes)	1.34	1.31	1.55	1.47	1.77	1.27	1.23	1.23	0.85	0.26
Additional charge if drop line and connection block needed	n.a.	n.a.	6.04	6.11	6.07	6.89	6.50	7.29	5.87	5.90

² Some previous estimates have been revised.

1991, and to \$0.48 in October 1995. As of October 1995, there were no monthly charges for touch-tone service in 53 of the sample cities, up from 7 sample cities in 1990.

Consumers can subscribe to a service with a lower recurring charge than the charge for unlimited private line (one party) service in 88 of the 95 sample cities, representing 95% of all urban households. Lower priced service options include two and four party line service, measured service (under which customers pay for each call), and measured party line service. Measured service can be metered (customers are charged by the minute) or message rated (customers are charged a flat amount for each call). As of October 1995, the national average for the lowest generally available recurring charge was \$6.68. The average minimum monthly bill, including subscriber line charges and taxes, was \$11.79. All 95 cities had at least one service option with a monthly charge of less than \$22.13, including subscriber line charges and taxes, and 83 had at least one option with a monthly charge less than \$15, including subscriber line charges and taxes.

The averages presented in Table 2 include only generally available rates. Thus, the averages do not reflect reduced rates that are made available to many low income customers. The most common assistance programs are the federal lifeline programs, which provide reduced monthly charges, and the federal Link-Up programs, which provide reduced connection charges. Subsidized rates are discussed in Section 4 below.

The federal Subscriber Line Charge (SLC) was \$3.50 per month for most residential customers during October 1995. This charge defrays a portion of local exchange costs that have been allocated to interstate toll services. Residents in some areas, such as those in Washington D.C., pay a lower federal SLC because their local exchange carriers have less cost per line allocated to interstate service. Intrastate SLCs, covering local costs allocated to intrastate service, are imposed in 5 of the sample cities. The intrastate SLCs range from \$0.87 per month to \$2.88 per month, and may vary within a state. For example, the intrastate SLC is \$0.83 in Indianapolis, served by Ameritech, and \$2.88 in Terre Haute, served by GTE.

In many cities the service with the lowest recurring charge was a measured service. The base rate in some cities included an allowance for a specific number of calls, but consumers in other cities would be charged for each outgoing call. In the 86 cities where measured service was available, the average monthly charge would be \$9.83 if the customer made fifty short distance calls of five minutes. This increases to \$15.29 with the inclusion of subscriber line charges and taxes. In some cities, message charges are higher if a local call is longer, covers more than a specified mileage or spans two zones. The \$9.83 average was calculated using the monthly charges for the measured rate service with the lowest recurring charge. This was for multiparty (shared line) service in some cities. The rates do not include options under which the customers would pay for a block of calling for a reduced rate.

In 1995 South Central Bell introduced a new measured service plan in some areas. This plan has two distinctive features. Customers will be billed at local service rates,

rather than toll rates, for all intralata calls. In addition, the plans have ceiling charges. Taken together, these features make the offering very attractive to customers who would otherwise have high intralata toll billings.

In other areas, many telephone subscribers pay additional monthly charges that enable them to make local calls over an extended geographic area. This means that there will be no charge, or only local measured service charges for calls that would otherwise be billed at toll rates. The local rate averages include extended area charges that are mandatory, or that are paid by most subscribers. Nine of the sample cities have optional extended area charges that were not included in the local service rate averages. Although these extended area options can substantially reduce toll charges for some customers, most subscribers do not elect the option in these cities. The charges for extended area service ranged from \$.97 in Baton Rouge and New Orleans, Louisiana, to \$21.00 in Philadelphia and Pittsburgh, Pennsylvania.

An increasing number of cities are using a tax to fund emergency 911 service. In some cities a fixed amount of tax is levied on each access line. Other cities use a percentage tax. Eighty-five of the 95 sample cities had emergency 911 charges as of October 1995, compared with 25 in October 1987. The average emergency 911 charge for a residential line with unlimited calling in these cities was \$0.47. On a nationwide average basis, \$0.42 of the average of \$2.34 in taxes was collected for emergency 911 service. The implementation of emergency 911 taxes accounted for about a one percent increase in the CPI local service index in recent years. An increasing number of jurisdictions are also using a tax to fund equipment for the hearing disabled. These taxes typically add 3 cents to 20 cents per month to the cost of telephone service.

Some charges that appear on telephone bills look like taxes but are not. These can be percentage amounts or fixed amounts. Local utility commissions often authorize surcharges in lieu of having the carrier refile tariffs. The surcharge might be keyed to specific categories of cost, or might change with changes in carrier profitability. Negative surcharges have been used to implement refunds ordered by a utility commission. Carriers have been instructed to categorize surcharges according to accounting treatment. The rate averages shown in the tables include surcharges. Taxes are separately identified.

New customers must pay a connection charge. The basic connection charge covers administrative and central office costs associated with connecting service and establishing the account. The national average connection charge was \$40.91, plus \$2.42 for taxes. The total connection charge ranged from \$9.82 in Fort Dodge, lowa to \$64.29 in New York City.

The basic connection charge includes installation of a drop line and connection block in 69 of the sample cities. The drop line and connection block is needed if new telephone service is being connected at a residence that has not previously had telephone service. Telephone company personnel must run a drop line from the local loop to the

outside of the customer's premises, and terminate the line at a connection block (network interface device). The connection block is the demarcation between the telephone company's network and the customer's premises wiring.

In the 26 cities with separate drop line and connection block charges, a new hookup cost \$48.89 for connection plus \$21.69 for the drop line and connection block. The average connection charge was \$37.94 in the 69 cities where there was no separate charge for the drop line and connection block. Interestingly, the average charge for local exchange service with unlimited calling was \$2.55 greater in cities that also had a separate drop line and block charge. Thus, separate drop line and block charges tended to occur in areas that have higher charges for other local services. The nationwide average charge for connection would increase by \$5.90 if drop line and connection block charges were included.

Wiring from the connection block into the residence and to the telephone sets is termed inside wiring, and is the responsibility of the customer. Prior to 1984, local exchange service rates covered installation and maintenance of wiring on the customer's premises. These services have been unbundled and detariffed. Customers are under no obligation to obtain inside wiring maintenance or installation services from their local exchange carrier. Telephone companies often install and maintain inside wiring, charging on a time and materials basis. In addition, all telephone carriers (in rare instances through affiliates) offer to maintain inside wiring for a flat monthly charge. Most carriers have more than one optional plan. The more expensive options may include diagnosis of trouble in customer telephone sets, and a loaner telephone if the customer's telephone breaks. The average monthly charge for the least expensive wiring maintenance option was \$1.50, plus tax. These unregulated charges have increased 79% since October 1987. Carriers may also charge a one time service order fee to add or change a wiring plan.

The survey also gathered information on touch-tone charges. The number of cities in which there is a separate charge for touch-tone service is falling. New customers in 9 of the 95 cities must pay an additional one time charge, down from 20 cities in October 1993. Averaged over all 95 cities, the average connection charge was \$0.23 greater if touch-tone service was ordered. In most cities customers must still pay a separate monthly charge for touch-tone service. However, the number of cities with separate monthly charges for touch-tone is decreasing along with the average amount. In October 1987, 91 cities charged separately for touch-tone; by October 1995 this number was down to 42. The average monthly charge has fallen from \$1.52 to \$0.48 over the same period.

3. Business Rates for Local Service

Local business rates were collected for the same 95 cities for which residential rates were collected, and averages were calculated using the same weights. Different companies use different classification systems for the types of access service offered to businesses. In some areas, there is a single rate for all business customer access lines. In many areas, however, there are separate rates for single business lines -- often termed "B-1" lines -- and for lines used by larger customers. The tariffs may distinguish "Key", "Multi-Line", "Complex wire", "PBX", or "Trunk" type access lines. Some companies limit the number of B-1 lines that a customer can have at the same location.

The majority of businesses use a single telephone line. However, these businesses account for only 10% to 20% of the access lines provided to businesses. Most lines are used by larger businesses who take two or more lines. These businesses must pay the multi-line federal subscriber line charge, which is higher than the residential and single-line business charge. Another difference between single line and multi-line customers is that multi-line customers generally want their lines to "hunt" or "rotary". This feature ensures that calls to a busy line will be switched automatically to a free line. There is an added charge for this feature in some areas.

Tables 3A, 3B, and 3C present business rate averages as of October 15, 1995. Businesses in many cities are required to take either measured or message rate service. The tables show estimates for "representative" service. This is the rate for unlimited service in the 53 cities where it is available, and the measured rate with 200 calls per line in the other 42 cities. Weighted averages are also shown for unlimited calling rates, and for measured or message service rates.

Tables 3A, 3B, and 3C show rates for a single-line business customer, for a Key system customer, and for a PBX customer. The Key and PBX rates include hunt group. If rates varied with the number of lines, the Key and PBX rates for the third line were used. Most cities did not have a separate Key system rate. The single-line rate was used if customers with Key systems were allowed to use multiple single lines. The PBX trunk rates were used if Key system customers were required to use PBX trunks. The recurring charges are shown on a per line basis. The Key system and PBX system connection charges shown in Tables 3B and 3C are the total charges for connecting three lines at the same time.

National Averages	Table 3A National Averages for Local Single-line Business Rates ³							
Tradional / troinged	10	Jai Cg						
				as of Octo				
	1989	1990	1991	1992	1993	1994	1995	
Representative Service charge⁴	\$31.06	\$30.97	\$32.29	\$32.45	\$32.70	\$32.25	\$32.46	
Subscriber Line Charges	3.55	3.57	3.57	3.56	3.57	3.57	3.57	
Extra for Touch-tone	2.43	2.35	1.84	1.71	1.67	1.21	0.97	
Tax including 911 charges	4.21	4.32	4.42	4.57	4.63	4.61	4.77	
Total monthly charge	41.25	41.21	42.12	42.29	42.57	41.64	41.77	
Number of cities in the sample offering Unlimited Service	59	56	54	54	54	53	53	
Unlimited Service base rate	33.04	33.29	34.12	34.06	34.85	34.39	34.48	
Subscriber Line Charges	3.65	3.69	3.70	3.70	3.70	3.70	3.69	
Extra for Touch-tone	2.12	2.11	1.87	1.84	1.76	1.12	1.00	
Tax including 911 charges	4.90	4.98	5.22	5.34	5.50	5.36	5.51	
Total monthly charge	43.71	44.07	44.91	44.94	45.81	44.57	44.68	
	1							
Number of cities in the sample offering Measured Service	83	83	84	84	84	87	87	
Measured Service base rate	16.18	16.17	16.76	16.55	16.60	16.74	17.11	
200 five minute business day calls	16.11	16.19	16.70	17.23	17.57	17.38	17.08	
Subscriber Line Charges	3.54	3.55	3.55	3.54	3.55	3.55	3.54	
Extra for Touch-tone	2.48	2.39	1.87	1.73	1.68	1.22	0.98	
Tax including 911 charges	4.41	4.53	4.56	4.77	4.86	4.83	5.00	
Total monthly charge	42.72	42.83	43.44	43.82	44.26	43.72	43.71	
Additional local five-minute call	0.093	0.093	0.091	0.093	0.094	0.092	0.091	
Inside wiring maintenance	1.78	1.91	2.05	2.03	2.08	2.26	2.39	
Rotary connection charge	71.05	71.36	72.75	72.55	71.41	69.88	67.87	
Extra for Touch-tone	1.70	1.89	1.13	1.19	1.17	0.92	0.27	
Tax	4.06	4.15	4.32	4.33	4.25	4.13	4.18	
Total charge	76.81	77.40	78.20	78.07	76.83	74.93	72.32	
Additional charge if drop line and connection block are needed	5.92	7.87	6.90	6.83	6.64	6.49	7.28	

³ Some previous estimates have been revised.

Rate based on unlimited service where available, and measured service with 200 same-zone local calls elsewhere.

Table 3B Nationwide Averages for a Local Key System Business Line⁵								
			Rates a	as of Octol	per 15			
	1989	1990	1991	1992	1993	1994	1995	
Representative Service charge ⁶	\$37.19	\$36.81	\$37.03	\$37.27	\$37.23	\$37.01	\$36.56	
Subscriber Line Charges	4.87	4.98	4.85	4.78	5.32	5.45	5.59	
Extra for Touch-tone	2.65	2.49	1.94	1.82	1.75	1.22	1.02	
Tax including 911 charges	5.18	5.21	5.12	5.28	5.36	5.35	5.49	
Total monthly charge	49.89	49.49	48.94	49.15	49.66	49.03	48.66	
# cities offering Unlimited Service	59	56	54	54	54	53	53	
Unlimited Service base rate	44.84	44.80	44.40	44.49	44.61	44.96	43.55	
Subscriber Line Charges	5.65	5.68	5.55	5.52	6.01	6.16	6.17	
Extra for Touch-tone	2.25	2.15	1.87	1.84	1.76	1.13	1.11	
Tax including 911 charges	6.77	6.68	6.65	6.78	6.92	6.86	6.92	
Total monthly charge	59.51	59.31	58.47	58.63	59.30	59.11	57.75	
# cities offering Measured Service	77	77	78	78	78	81	81	
Measured Service base rate	20.38	20.55	19.93	19.49	19.56	19.89	20.35	
Cost of 200 5-minute business-day calls	16.01	16.10	16.89	17.44	17.80	17.60	17.29	
Subscriber Line Charges	4.78	4.89	4.75	4.67	5.23	5.38	5.52	
Extra for Touch-tone	2.77	2.59	1.99	1.86	1.77	1.22	1.00	
Tax including 911 charges	4.93	5.10	4.91	5.06	5.18	5.18	5.36	
Total monthly charge	48.87	49.23	48.47	48.52	49.54	49.27	49.52	
Additional local five-minute call	0.093	0.094	0.091	0.093	0.095	0.093	0.091	
Connection charge for three rotary lines	166.89	165.13	178.14	178.25	169.47	170.49	168.05	
Extra for Touch-tone	5.10	5.68	3.40	3.39	3.34	2.75	0.81	
Tax	9.43	9.30	9.67	9.61	8.95	9.02	9.86	
Total charge for three lines	181.42	180.11	191.21	191.25	181.76	182.26	178.72	
Additional charges for three lines if drop lines and connection blocks are needed	13.39	14.09	20.79	12.76	12.20	10.90	11.69	

⁵ Some previous estimates have been revised.

⁶ Rate based on unlimited service where available, and measured service with 200 same-zone local calls elsewhere.

Table 3C Nationwide Averages for a Local PBX Business Trunk ⁷							
Nationwide Average	s for a L	.ocal PB	X Busin	ess iru	nk'		
		R	ates as of	October 1	5		
	1990	1991	1992	1993	1994	1995	
Representative Service charge ⁸	\$39.24	\$40.97	\$41.05	\$40.81	\$39.89	\$40.21	
Subscriber Line Charges	4.98	4.85	4.78	5.32	5.45	5.59	
Extra for Touch-tone	3.29	2.66	2.47	2.36	1.74	1.39	
Tax including 911 charges	5.63	5.69	5.88	5.93	5.82	6.03	
Total monthly charge	53.14	54.17	54.18	54.42	52.90	53.22	
# cities offering Unlimited Service	56	54	54	54	53	53	
Unlimited Service base rate	49.40	51.54	51.28	51.21	51.20	51.38	
Subscriber Line Charges	5.68	5.55	5.52	6.01	6.16	6.17	
Extra for Touch-tone	3.29	2.66	2.47	2.36	1.74	1.39	
Tax including 911 charges	7.44	7.69	7.89	8.01	7.85	8.07	
Total monthly charge	65.81	67.44	67.16	67.59	66.95	67.01	
# cities offering Measured Service	77	78	78	78	81	81	
Measured Service base rate	20.53	21.00	20.76	20.65	20.20	20.61	
200 five-minute business-day calls	16.10	16.57	17.18	17.55	17.34	17.03	
Subscriber Line Charges	4.89	4.75	4.67	5.23	5.38	5.52	
Extra for Touch-tone	3.41	2.69	2.47	2.34	1.72	1.33	
Tax including 911 charges	5.16	5.04	5.22	5.32	5.21	5.37	
Total monthly charge	50.09	50.05	50.30	51.09	49.85	49.86	
Additional local five-minute call	0.094	0.089	0.091	0.092	0.090	0.089	
	1						
Connection charge for three rotary lines	164.60	178.28	178.39	169.60	170.33	167.04	
Extra for Touch-tone	5.51	3.22	3.39	3.34	2.75	0.81	
Tax	9.20	9.65	9.61	8.95	9.01	9.85	
Total charge for three lines	179.31	191.15	191.39	181.89	182.09	177.70	
Additional charges for three lines if drop lines and connection blocks are needed	14.09	20.79	12.58	12.20	10.90	11.69	

 $[\]sp ^{7}$ \sp Some previous estimates have been revised.

⁸ Rate based on unlimited service where available, and measured service with 200 same-zone local calls elsewhere.

As of October 1995, the average bill for "representative" single-line service was \$32.46 for the access line and message units, \$3.57 for federal and state subscriber line charges, \$0.97 for touch-tone service, and \$4.77 for taxes and 911 charges, for a total average charge of \$41.77.

The average bill for a "representative" Key system customer was \$36.56 (per line) for the access line and message units, \$5.59 for federal and state subscriber line charges, \$1.02 for touch-tone service, and \$5.49 for taxes and 911 charges. The total representative charge was \$48.66 per line.

The average bill for a "representative" PBX system customer was \$40.21 (per line) for the access line and message units, \$5.59 for federal and state subscriber line charges, \$1.39 for touch-tone service, and \$6.03 for taxes and 911 charges. The total representative charge was \$53.22 per line. PBX customers typically have 5 to 10 stations for each trunk line. Some PBX customers request direct inward dial capability. This enables each station to have a telephone number. Thus, a customer with 50 trunks might have 300 stations. PBX customers with direct inward dial typically pay \$5 to \$10 per month for each block of 20 numbers.

Businesses can take local access service with unlimited local calling in 53 of the 95 sample cities. In these cities, the October 1995 average monthly charge for single-line business was \$44.68, including SLCs, touch-tone calling, and taxes. Businesses in the other 42 cities are required to take some form of measured service. In 45 cities, single-line businesses have the option of taking either unlimited or measured service. Single-line measured service is available in Texas, but multi-line measured service is not offered there. Thus, measured service is available to single-line businesses in 87 sample cities, and to multi-line businesses in 81 sample cities. The average recurring charge for single-line measured service was \$17.11 in October. In some cities the recurring charge includes an allowance for some calling. Including these allowances, single-line businesses would pay an average of \$17.08 for the first 200 five minute day time calls. Including SLCs, touch-tone calling, and taxes, the average charge would be \$43.71.

The connection charge for a single touch-tone business line averaged \$72.32, including taxes. Key and PBX customers adding a single line would pay a similar amount. In many cities, however, the telephone company has a lower connection charge for additional lines on the same service order. The total connection charge for three Key system lines, with hunting, was \$178.72. The total connection charge for three PBX system lines, with hunting, was \$177.70. As with residential service, there may be an additional charge if a drop line and connection block must be installed as part of connection.

4. LIFELINE RATES

The local rate averages shown in Table 2 are based on rates that are available to all customers. Many states have programs that subsidize monthly service charges or connection fees paid by low-income households. Most of these programs are part of the FCC sponsored lifeline and Link-Up programs. As of October 1995, assistance for monthly service charges was offered in 70 of the 95 sample cities, representing 73% of the urban consumers. Connection assistance was offered in 90 of the 95 sample cities representing 96% of urban consumers. Carriers in 66 of the sample cities, representing 70% of urban consumers, offered both types of assistance programs.

Table 4 summarizes data for subsidized monthly rates and connection charges. The first column shows nationwide average charges for unsubsidized service. The second column shows the average unsubsidized charges in the cities where subsidized service is offered. The third column shows the weighted average for lifeline and Link-Up charges. These rates reflect benefits from both federal and state telephone assistance plans. For example, the Link-Up program covered half of the normal connection charge in Ameritech regions of Ohio and Wisconsin. State plans covered the balance of the connection charges. In a few cities, customers could not obtain unlimited calling service as part of the lifeline program. An equivalent amount for an unlimited calling rate was calculated as the measured service recurring rate plus the charge for 100 five minute day time calls.

The final column in Table 4 shows the average benefit in cities where assistance plans were offered. Enrolled customers who had private line service and unlimited calling received an average benefit of \$9.06 per month. This benefit includes reductions in the basic rate, the subscriber line charges, and taxes. Customers taking the least expensive service received an average benefit of \$7.82 per month. Monthly benefits exceeded \$7 per month in 62 of the 70 cities that had a subsidy plan. Customers who qualified for Link-Up assistance received an average benefit of \$26.66 in the form of a reduced connection charge.

Appendix 2 shows the total charge for private line rotary service with unlimited calling, including SLCs, surcharges, and taxes, for each of the 95 cities in the sample. The appendix also shows the total charge for the most comparable lifeline or subsidized rate service. In some cases this is the charge for measured service with 100 five minute daytime same zone calls. The appendix also shows the connection charge for rotary service, including surcharges and taxes, and the comparable cost under the Link-Up or subsidized connection charge program. Blank spaces in Appendix 2 indicate cities where a subsidized rate is not available. Subsidized connection charges of \$0.00 in Ohio and Wisconsin reflect the fact that there are no connection charges for customers who qualify for assistance.

Table 4 Comparison of Generally Available Rates to Subsidized Rates (October 1995)

	(
	Generally A	Available Rates		
	National Average		Subsidy Plan Rate	Benefit
	(a)	(b)	(c)	(b) - (c)
Unlimited local calling	\$13.62	\$13.84	\$8.99	
Federal and state SLCs	3.54	3.47	0.23	
Taxes and 911 charges	2.34	2.31	1.34	
Total for rotary service	19.49	19.62	10.56	9.06
Lowest generally available rate	6.68	6.61	2.87	
Federal and state SLCs	3.54	3.47	0.23	
Taxes and 911 charges	1.56	1.49	0.65	
Total for rotary service	11.79	11.57	3.75	7.82
Minimum connection charge	40.91	41.01	15.86	
Taxes	2.42	2.51	1.00	_
Total for rotary service	43.33	43.52	16.86	26.66
4				

Subsidized monthly service rate averages are for the 70 cities with subsidized monthly rates. These cities represent 73% of the sample weight.

Subsidized connection charge averages are for the 90 cities with connection assistance plans. These cities represent 96% of the sample weight.

Both type of assistance programs were offered in 66 of the sample cities.

Appendix 2 shows lifeline rates in Wisconsin that are the same as the normal charge. All Wisconsin Bell customers are required to take message service. The lifeline benefit in Wisconsin consists of a slight reduction in the message charge after the customer has already made 150 calls in a month. Thus, the lifeline charge would be the same as the normal charge for customers making 100 calls in the month.

Southwestern Bell has two plans that offer subsidized monthly rates in Texas. One plan offers significantly greater benefits than the other plan, but has very strict eligibility requirements. The newer plan has lower benefits, but more liberal eligibility requirements. Southwestern Bell expects much greater participation in the new plan. The rates for this newer plan are shown in Appendix 2.

5. RURAL TELEPHONE SERVICE

Rural telephone service has several distinctive features. Rural service is often provided by cooperatives or small companies that do not serve large metropolitan areas. Local exchanges in rural areas often cover a large geographic area with low population density. Rural carriers frequently have no large business accounts. They also commonly have a higher percentage of toll and access revenues than do large carriers which serve urban areas. Many rural carriers serve a single exchange, and so cannot average rates over multiple exchanges. This last attribute means that rates may be relatively low in areas with older plant, and then may jump significantly the year a rural carrier replaces its central office switch.

Data presented in Section 6, Table 8A, show that rural households spent an average of \$642 for telephone service in 1994, compared with an average of \$698 for urban households. However, rural households devote the same percentage of overall expenditures to telephone service as urban households. Over the past few years, telephone expenditures by rural households have grown faster than telephone expenditures by urban households. This section examines available data on rural telephone rates.

The Bureau of Labor Statistics telephone service price indices do not provide adequate indicators of rural telephone service rate changes. The consumer price indices reflect changes in prices paid by urban consumers. Urban consumers are those persons living in Metropolitan Statistical Areas (MSAs) and other urbanized places with populations of at least 2500. More than four out of five Americans live in urban areas. The CPI local rate sample does not include quotes for service provided to non-urban areas.

The Producer Price Index local service sample covers the statewide operations of several local exchange companies. Thus, the PPI local service indices cover some rural operations. However, it is unlikely that the PPI sample includes many small rural telephone companies, since the sample is small, and the probability of selection was based on company revenues. The rural rates charged by larger multi-exchange carriers are not necessarily representative of the rates charged by small rural carriers. Multi-exchange carriers typically have local service tariffs that specify rate bands based on exchange size. Since rural exchanges tend to be small, the large carriers generally charge lower rates in rural areas than they do in urban areas. Their rates, however, tend to be based on statewide costs. Small rural carriers, by contrast, often serve a single exchange. Their rates may be closely tied to local factors. Thus, the CPI and PPI local service indices are better indicators of price changes in urban areas than in rural areas.

Relatively little rate data has been compiled for rural carriers. In 1982, The Rural Utilities Service (RUS), formerly the Rural Electrification Administration, conducted a special study for the Office of Management and Budget. Rate information was collected for some 1100 companies in 1972 and for more than 1300 companies in 1982. Over the ten year period, residential rural rates rose by about 39.6%, compared with a 58.5%

increase in the PPI local residential service index. In 1982, the residential rate averages were \$8.12 for small private systems, \$8.87 for cooperatives, \$9.78 for exchanges owned by holding companies and \$11.58 for municipal systems. Over the prior ten years, however, rates in municipal systems increased at a much slower rate than the rates of other rural systems.

The average rate for all rural companies was \$6.16 in 1972 and \$8.60 in 1982. Appendix 6 contains nationwide averages for local residential rates -- \$6.38 for 1972 and \$10.18 for 1982. This suggests that the average residential rate was about \$1.50 per month lower in rural areas, compared with the national average in 1982.

Local exchange carriers file their local service tariffs with state public utility commissions. Wisconsin has an unusually large number of telephone companies, many of which serve rural exchanges. At one time the Wisconsin Public Service Commission compiled rate averages based on exchange size. Table 5 shows the number of exchanges in Wisconsin for selected size categories. The table also shows one party residential rates for three size categories. The data shows several patterns that may be typical for many states. The number of very small exchanges -- those with less than 2,000 stations -- has declined over time. The number of large exchanges -- those with more than 25,000 stations -- has increased over time. Table 5 also shows that rates in the smallest exchanges are generally lower than rates in the largest exchanges. Rates remained fairly constant from 1986 through 1990. The averages for the smallest exchanges rose slightly, while the averages for larger exchanges fell by about 5%. The Wisconsin commission staff has not compiled comparable rate averages in recent years.

Some caution must be used interpreting the rates shown in Table 5. The rates shown in the table represent medians through 1985, and averages thereafter. As can be seen by looking at Table 7, there are differences between average values and median values. The sharp increase between 1985 and 1986 can be explained by this change. In addition, some differences over time are due to movement of exchanges between groups.

Even if data were available for Wisconsin exchanges starting 1993, the rate averages would not be comparable to the averages published for prior years. Local rate structures changed significantly in Wisconsin in 1993. Most companies dramatically increased the charge for local service, greatly enlarged the sizes of local exchanges, and converted from unlimited calling to measured service for calls outside the immediate exchange. Calls that were formerly carried at intrastate toll rates are now carried at the five cents per minute local rate. Thus, the increase in local service rates should be offset by the decrease in intrastate toll charges.

Table 5 Exchange Size and Rates in Wisconsin⁹

	Number of Exchanges with				Total	One Party Residential Rate for Exchanges with		
	fewer than 2,000 stations	2,001 to 10,000 stations	10,001 to 25,000 stations	more than 25,000 stations	Number of Exchanges	fewer than 2,000 stations	10,001 to 25,000 stations	more than 25,000 stations
1972	132	319	68	86	605	\$5.46	\$6.72	\$6.50
1973	130	312	72	91	605	5.58	6.90	6.95
1974	116	322	81	83	602	5.57	7.00	7.40
1975	107	327	82	86	602	5.55	7.02	7.03
1976	95	337	80	92	604	5.49	7.97	7.89
1977	92	328	76	105	601	5.77	8.30	8.15
1978	95	324	72	110	601	6.44	8.38	8.90
1979	83	330	81	104	598	5.94	8.13	9.50
1980	78	322	86	108	594	6.05	8.10	10.09
1981	73	319	92	110	594	6.40	8.75	10.25
1982	71	319	94	110	594	6.50	9.95	10.50
1983	67	318	98	110	593	7.60	11.95	12.77
1984	67	311	98	117	593	8.70	16.95	16.78
1985	63	311	98	121	593	8.20	15.30	15.65
1986	63	311	98	121	593	9.02	13.71	14.73
1987	61	306	104	122	593	9.00	13.47	14.20
1988	61	307	102	123	593	9.10	13.46	14.27
1989	60	300	106	127	593	8.77	13.27	14.19
1990	57	300	107	129	593	9.14	13.18	14.01

⁹ Based on data compiled by the Wisconsin Public Service Commission. The rate levels represent medians through 1985 and include the lease of a telephone. Starting in 1986, the rates represent averages and exclude equipment, subscriber line charges, and inside wiring maintenance plans. The rates include extended area charges.

Recently, RUS began collecting rate information from their borrowers. RUS requires borrowers to submit Form 479 that contains details of the firm's operations. Borrowers are asked to report the single party residential rate and the single-line business rate for each of their exchanges. The reported rates do not include subscriber line charges, surcharges, or taxes. The Industry Analysis Division has taken these rates and constructed state-by-state weighted averages and a national weighted average for 1994. The national average residential rate for RUS borrowers was \$11.05 and the single-line business rate was \$20.88 in 1994. This compares with the Urban Rates Survey averages of \$13.28 and \$32.25 in 1994.

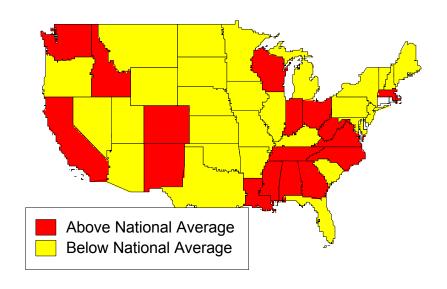
As previously mentioned, great care must be taken when comparing the rates of small rural carriers to those of larger urban carriers. Many RUS borrowers own fewer than five exchanges. Consequently, calls outside of the borrowers' small franchise territories are commonly toll calls. Therefore, the effective telephone rate for many of the firms' subscribers may be higher than indicated. Map 1 compares the RUS borrowers' average residential rates in each state to the national average residential rate of RUS borrowers. Map 2 compares single-line business rates in a similar manner. Table 6 presents the state-by-state averages of the rates of RUS borrowers in 1994. In addition to state-by-state averages, table 6 presents a composite average rate per access line consisting of an average of business and residential rates weighted by the number of business and residential subscribers. This average was \$12.86 in 1994. Since these firms provide a very small percentage of the access lines in many states, the averages presented in table 6 do not represent average rates paid by all customers in a state. The percentage of access lines provided by RUS borrowers in each of the states is also included in table 6. Overall, RUS borrowers provide slightly over 4% of the nation's access lines.

RUS revenue data also provides an indirect means of assessing changes in rural rate levels. Table 7 provides revenue per subscriber data from the annual volumes of Statistical Report, Rural Telephone Borrowers, U.S. Department of Agriculture Publication 300-4. The table shows revenue per subscriber for local service and for net toll and access services. The data are for both residential and business customers. The local service figures do not include revenue from subscriber line charges. Subscriber line charge revenue is included with net toll and access. The table shows data for all rural borrowers, and for borrowers with 1 to 499 subscribers.

The RUS revenue data suggests that, on average, local rate increases in rural areas have been similar to increases nationwide.

Map 1

Average Residential Rates of RUS Borrowers by State in 1994



Map 2

Average Business Rates of RUS Borrowers by State in 1994

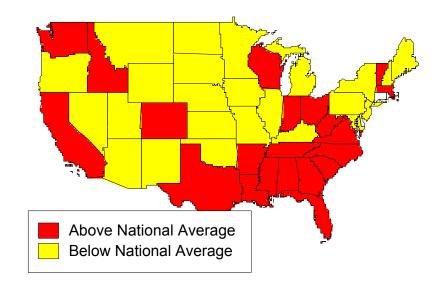


Table 6
Average Rates* for RUS Borrowers by State in 1994

State	Average	Average	Average Rate	Percentage of
State	Single-line	Residential	per Access Line	State's Access
Alabarra	Business Rate	Rate	C4 4 44	Lines
Alabama	\$24.88	\$12.42	\$14.41	7.72%
Alaska	\$24.23	\$14.09	\$17.37	32.99%
Arizona	\$20.78	\$9.43	\$11.88	3.15%
Arkansas	\$22.29	\$9.85	\$12.03	13.85%
California	\$24.87	\$14.53	\$16.32	0.35%
Colorado	\$22.40	\$13.89	\$15.86	1.70%
Florida	\$22.32	\$8.79	\$11.46	1.70%
Georgia	\$24.00	\$12.32	\$14.41	9.51%
Idaho	\$20.92	\$11.81	\$13.76	3.60%
Illinois	\$13.58	\$9.54	\$10.07	0.71%
Indiana	\$21.68	\$14.49	\$15.83	17.24%
Iowa	\$10.99	\$8.48	\$8.94	6.45%
Kansas	\$9.78	\$6.78	\$7.36	5.69%
Kentucky	\$17.00	\$10.86	\$11.69	8.78%
Louisiana	\$27.46	\$14.91	\$16.86	5.65%
Maine	\$15.25	\$9.22	\$10.02	5.18%
Maryland	\$9.00	\$6.00	\$6.51	0.18%
Massachusetts	\$23.28	\$12.21	\$13.63	0.07%
Michigan	\$13.40	\$8.07	\$8.85	2.17%
Minnesota	\$16.81	\$10.35	\$11.32	8.09%
Mississippi	\$22.89	\$14.02	\$15.29	6.03%
Missouri	\$11.91	\$6.91	\$7.74	3.70%
Montana	\$20.23	\$10.70	\$12.54	12.88%
Nebraska	\$16.62	\$9.84	\$11.15	8.83%
Nevada	\$14.92	\$10.95	\$12.04	0.82%
New Hampshire	\$16.62	\$7.95	\$9.61	3.42%
New Jersey	\$15.50	\$7.80	\$10.04	3.09%
New Mexico	\$20.79	\$13.76	\$15.31	3.42%
New York	\$14.62	\$8.60	\$9.58	1.17%
North Carolina	\$26.77	\$11.38	\$14.07	7.76%
North Dakota	\$13.21	\$9.76	\$10.50	14.91%
Ohio	\$24.23	\$15.47	\$16.71	0.40%
Oklahoma	\$16.42	\$10.23	\$11.36	9.77%
Oregon	\$14.66	\$10.02	\$10.95	3.75%
Pennsylvania	\$19.95	\$10.10	\$12.09	9.05%
South Carolina	\$22.24	\$10.81	\$13.17	12.07%
South Dakota	\$12.66	\$7.53	\$8.52	14.55%
Tennessee	\$27.33	\$11.51	\$14.13	9.10%
Texas	\$25.49	\$10.08	\$13.18	3.55%
Utah	\$19.78	\$10.51	\$12.37	1.94%
Vermont	\$21.27	\$9.54	\$11.89	4.15%
Virginia	\$21.67	\$11.06	\$12.48	7.64%
Washington	\$21.54	\$11.88	\$13.90	1.34%
West Virginia	\$34.77	\$21.56	\$23.40	3.42%
Wisconsin	\$21.96	\$21.36 \$11.75	\$13.53	13.36%
Wyoming	\$17.26	\$11.75 \$10.69	\$13.53 \$12.55	
vvyoning	φ17.20	φ10.09	φ12.55	6.03%
National Average	\$20.88	\$11.05	\$12.86	4.11%

^{*} Average rates do not include subscriber line charges, surcharges, taxes, or 911 charges

	Table 7 Revenue per Subscriber for RUS Borrowers ¹⁰									
	Media	ın: All Borro	owers	Averaç	ge: All Borr	rowers		Borrowers w 500 Subscri		
	Local Service	Net Toll and Access	Total ¹¹	Local Service	Net Toll and Access	Total ¹¹	Local Service	Net Toll and Access	Total ¹¹	
1972	\$80.76	\$75.13	\$155.89	NA	NA	NA	\$76.56	\$84.84	\$161.40	
1973	85.04	84.25	169.29	NA	NA	NA	79.61	91.88	171.49	
1974	89.65	99.51	189.16	\$99.73	\$119.84	\$219.57	83.37	105.39	188.76	
1975	94.45	110.49	204.94	107.02	133.53	240.55	88.97	116.72	205.69	
1976	100.75	121.09	221.84	114.93	151.54	266.47	92.36	130.64	223.00	
1977	108.49	133.93	242.42	124.58	168.06	292.64	94.60	139.31	233.91	
1978	116.25	153.93	270.18	134.75	193.17	327.92	101.48	159.59	261.07	
1979	121.47	174.72	296.19	143.96	224.25	368.21	106.99	185.85	292.84	
1980	126.62	190.05	316.67	152.17	250.21	402.38	112.74	193.55	306.29	
1981	134.94	223.65	358.59	162.09	293.64	455.73	121.63	218.86	340.49	
1982	143.27	272.46	415.73	175.62	337.81	513.43	126.93	261.21	388.14	
1983	147.89	312.08	459.97	186.33	370.89	557.22	127.80	320.47	448.27	
1984	152.25	346.03	498.28	191.71	402.18	593.89	132.75	326.77	459.52	
1985	156.36	363.62	519.98	197.73	426.57	624.30	138.30	371.75	510.05	
1986	157.75	397.92	555.67	197.01	433.48	630.49	149.97	426.41	576.38	
1987	151.84	425.42	577.26	189.98	446.67	636.65	141.41	486.74	628.15	
1988	148.92	427.49	576.41	182.68	456.00	638.68	139.82	493.78	633.60	
1989	145.87	444.99	590.86	184.83	480.19	665.02	136.64	503.15	639.79	
1990	149.69	459.78	609.47	191.10	496.64	687.74	137.72	539.79	677.51	
1991	149.75	466.68	616.43	190.61	500.82	691.43	137.77	573.44	711.21	
1992	152.87	520.53	673.40	195.07	518.67	713.74	136.81	688.87	825.68	
1993	157.14	556.70	713.84	198.74	535.23	733.97	152.60	807.40	960.00	
1994	164.85	584.07	748.92	206.74	541.88	748.62	NA	NA	NA	
1995	170.37	604.13	774.50	212.17	546.37	758.54	156.03	953.43	1109.46	
										
						wth over t		I		
	3.3%	9.5%	7.2%	3.7%	7.5%	6.1%	3.1%	11.1%	8.7%	
			Average	annual r	ate of are	wth over t	he period			
		if Federal						ce revenue		
	4.3%	9.1%	7.2%	4.6%	7.1%	6.1%	4.2%	10.9%	8.7%	

¹⁰ From annual Rural Utilities Service Statistical Report: Rural Telecommunications Borrowers.

¹¹ Excludes miscellaneous revenues and uncollectables.

Figure 11

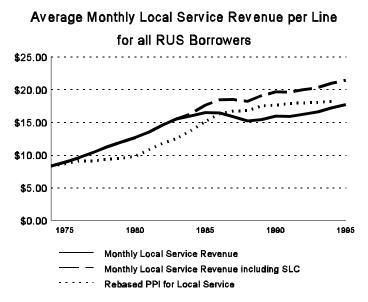
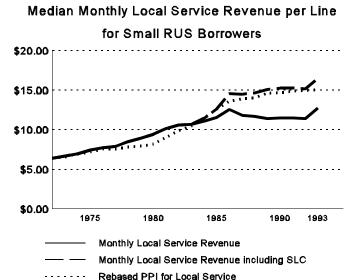


Figure 11 shows the average local service revenue per subscriber per month. revenue per month averages are higher than the average level of residential rates because the data includes business customers. because some subscribers have multiple access lines. because rural carriers may have revenue from premium local services, such as touch-tone service and call waiting. Since the local revenue figures do not include subscriber line charges, the graph also shows the monthly revenue per line with residential subscriber line charge added to it. For comparison, the

graph also shows the discontinued PPI series for local service, rebased so the series start at the same value in 1974. The graph suggests that rural rates rose more rapidly than nationwide rates through 1980 and that they have been rising at a similar rate since then.

Figure 12 shows local service revenue per line for the smallest RUS exchanges, those with less than 500 subscribers. For comparison, the graph also shows the

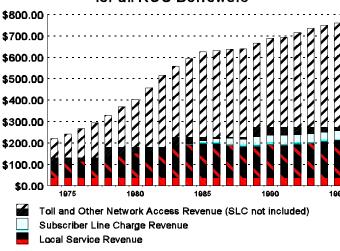
Figure 12



discontinued PPI series for local service, rebased so the series start at the same value in 1972. Taken together, Figure 11 and Figure 12 suggest that the percentage increases in local telephone service rates in rural areas have been similar to the percentage increases nationwide.

Figure 13

Average Annual Revenue per Line
for all RUS Borrowers



Telephone expenditures by rural households have risen faster than expenditures bν urban households. The difference appears to be increased use of toll services. as indicated by the RUS data. Figure 13 shows local service revenues per subscriber as well as network access and toll revenues per subscriber. Annual subscriber line charges have removed from the charges, and are shown separately. The figure shows that toll and access revenues per subscriber have grown rapidly since 1974. In contrast local service revenue per subscriber has grown little since 1986.

Figure 13 and table 7 show that RUS company revenue per line has grown rapidly since 1974. Most of the growth has come from toll service and access revenues. In 1974, local service revenues accounted for 45% of RUS company revenues. Even when federal subscriber line charges are included in local service revenue, that percentage has declined to 34% in 1995. Network access and toll revenues, even excluding federal subscriber line charges, grew by about 7.1% per year over that period. This reflects the sustained growth in toll calling and the resulting access charge revenue, as well as the growth in Universal Service Fund payments to high cost carriers.

6. EXPENDITURES FOR TELEPHONE SERVICE

a. Consumer Expenditures for Telephone Service

The BLS conducts surveys of consumer expenditures, in part, to develop weights for CPI indices. The surveys collect income, expenditure, and demographic information for "Consumer units". Consumer units are often referred to as households, but the definition is not identical to households, as defined by the Census Bureau. There were 100 million consumer units in 1993, compared with 98.8 million households. BLS uses two types of surveys: diary surveys - where household members record most types of purchases for a few weeks; and, interview surveys - where households are interviewed to determine their expenditures for the prior three months. Households selected for the interview survey are interviewed in five successive quarters.

Prior to 1984, BLS published separate expenditure estimates based on the diary and the interview surveys. Telephone expenditures were then collected only through the interview surveys, and average levels of telephone expenditures were published only in the interview summaries. BLS began publishing integrated estimates in 1984, combining information from both types of surveys. The integrated estimates are considered more reliable, and were used for most of the data shown in the following tables. The diary survey now collects telephone expenditures in a category labeled "Rent, utilities, phone, household fuel."

The BLS introduced another change in methodology in 1984. Expenditure data were not collected for rural households for 1980 through 1983. Nationwide expenditure data are available for 1984 through 1994. More than 80 percent of households are in urban areas, and the estimates of telephone expenditures by urban households are similar to estimates for nationwide average telephone expenditures. Nonetheless, 1980 through 1983 data are not completely comparable with subsequent data.

Several changes in the telephone industry make it difficult to interpret changes in the BLS estimates of household expenditures for telephone service. Prior to 1983, most residential telephones were leased from local exchange carriers. As a consequence of the FCC's Computer Inquiry II proceeding, telephone sets were detariffed on January 1, 1984. Existing tariffed equipment became known as "embedded rate base" and much of this equipment was sold "in place" to consumers. Significant amounts of equipment purchases were included on local telephone bills in 1983 and 1984. Telephone bills have not included significant amounts of equipment sales since that time. Bell System embedded rate base was transferred to AT&T in 1984, but the lease payments were included in local telephone bills into 1987. AT&T now directly bills customers for equipment lease charges.

The BLS has changed the consumer expenditure survey questionnaires to reflect changes in the equipment market. Beginning in 1982, the survey specifically included telephones and accessories in its list of home furnishings and related household items.

Amounts appearing on the telephone bills, however, were included as telephone service until 1986. Thus, the 1983 and 1984 estimates include the sale of the embedded base. The current questionnaire separates equipment sales from other items that appear on telephone bills. The questionnaire does not specifically address payments for leasing telephone equipment, commonly known as customer premises equipment (CPE). CPE lease payments may still be reported as telephone service expenditures.

The consumer expenditure survey continues to classify payments for inside wiring maintenance as part of telephone service. This probably accounts for between \$10 to \$20 of average annual household telephone expenditures. Beginning in 1991, consumers have been asked to separately identify cellular telephone payments. The BLS has not yet published a separate estimate for cellular telephone expenditures, but rather, continues to include these with other telephone expenditures.

The BLS survey requests both local and toll telephone expenditures. However, many respondents only provide a total bill, or provide inaccurate breakdowns of the local and toll components of the bill. Accordingly, the BLS only publishes a total telephone service expenditure estimate. The BLS is willing to furnish computer tapes that show local and toll expenditures for each household in the sample.

Table 8A shows expenditure data for all households or consumer units and demographic breakdowns of urban vs. rural and by census region. Table 8B shows expenditure data for demographic breakdowns by race and household income. Table 8C presents expenditure data broken down by age. The survey assigns a race and age to the household based on the race and age of the reference person, that is, the person who is identified as the head of the household. Tables 8A, 8B, and 8C also show telephone expenditures as a percentage of total household expenditures.

The average annual expenditures on telephone service by all households increased from \$325 in 1980 to \$690 in 1994. Telephone expenditures represented 2.2% of all household expenditures in 1994 and have remained fairly constant since 1980. As noted above, expenditure data from before 1984 did not cover rural areas, and may not be entirely consistent with current data.

			Tab	e 8A			
	Annual Ex	penditures			by Selecte	d Groups ¹²	
	All	Urban	Rural		Census		
	Consumers	Consumers	Consumers	Northeast	Midwest	South	West
	Aver	age Expendit	ures for Telep	hone Service	by All Housel	nolds	
1980 ¹³	\$325	\$325		\$335	\$303	\$339	\$320
1981 ¹⁵	\$360	\$360		\$358	\$353	\$365	\$366
1982 ¹⁵	\$375	\$375		\$351	\$364	\$372	\$426
1983 ¹⁵	\$415	\$415		\$410	\$393	\$435	\$419
1984	\$435	\$450	\$359	\$433	\$407	\$445	\$458
1985	\$455	\$466	\$402	\$459	\$419	\$457	\$500
1986	\$471	\$478	\$425	\$470	\$444	\$477	\$494
1987	\$499	\$503	\$475	\$501	\$464	\$505	\$532
1988	\$537	\$544	\$493	\$524	\$498	\$545	\$585
1989	\$567	\$577	\$505	\$570	\$532	\$572	\$601
1990	\$592	\$599	\$549	\$589	\$547	\$616	\$611
1991	\$618	\$621	\$601	\$621	\$595	\$616	\$647
1992	\$623	\$629	\$580	\$636	\$589	\$624	\$646
1993	\$658	\$666	\$606	\$677	\$616	\$673	\$664
1994	\$690	\$698	\$642	\$700	\$663	\$690	\$713
	Telephone	Expenditure	s as a Percen	tage of Total I	Household Ex	penditures	
1980 ¹⁵	1.9%	1.9%		1.9%	1.9%	2.1%	1.8%
1981 ¹⁵	2.1%	2.1%		2.1%	2.0%	2.1%	1.9%
1982 ¹⁵	2.1%	2.1%		2.1%	2.0%	2.1%	2.2%
1983 ¹⁵	2.1%	2.1%		2.1%	2.0%	2.3%	1.9%
1984	2.0%	2.0%	2.0%	2.0%	1.9%	2.1%	1.9%
1985	1.9%	1.9%	2.0%	2.0%	1.8%	2.0%	1.9%
1986	2.0%	1.9%	2.2%	1.9%	2.0%	2.1%	1.9%
1987	2.0%	2.0%	2.3%	2.0%	2.0%	2.2%	1.9%
1988	2.1%	2.0%	2.3%	2.0%	2.0%	2.2%	2.0%
1989	2.0%	2.0%	2.2%	2.0%	2.0%	2.2%	1.9%
1990	2.1%	2.1%	2.2%	2.1%	2.1%	2.3%	1.9%
1991	2.1%	2.0%	2.4%	2.0%	2.2%	2.2%	2.0%
1992	2.1%	2.1%	2.3%	2.0%	2.1%	2.2%	1.9%
1993	2.1%	2.1%	2.3%	2.1%	2.1%	2.3%	1.9%
1994	2.2%	2.2%	2.2%	2.1%	2.2%	2.3%	2.0%

The data in tables 8A, 8B, and 8C reflect the total household expenditures for all telephone services by all households, including those that do not have telephone service. Thus, the data likely understate expenditures for those households with service and overstate expenditures for those households without service. The household telephone expenditure data are recast in Tables 9A through 9C to show average bills for households with service.

The nationwide estimates for 1980 through 1983 were based on samples that did not include rural areas. In addition, the BLS did not begin integrating the diary and interview surveys until 1984. Accordingly, some caution should be used in comparing estimates for before and after 1984.

			Tab	le 8B			
	Annual E	xpenditures	for Teleph	one Service	e by Race a	ind Income	
	By Rad	се	Households	grouped by to	tal income fror	m lowest to hig	hest quintile
	White & Other	Black	1	2	3	4	5
	Ave	rage Expendit	ures for Telep	ohone Service	by All House	holds	
1980 ¹⁴	\$321	\$356	\$202	\$266	\$335	\$365	\$450
1981 ¹⁶	\$359	\$370	\$235	\$294	\$361	\$415	\$487
1982 ¹⁶	\$368	\$432	\$257	\$314	\$354	\$423	\$506
1983 ¹⁶	\$411	\$448	\$268	\$353	\$386	\$472	\$571
1984	\$432	\$462	\$295	\$350	\$430	\$476	\$630
1985	\$454	\$463	\$311	\$363	\$449	\$503	\$628
1986	\$470	\$478	\$337	\$383	\$453	\$526	\$662
1987	\$498	\$506	\$335	\$403	\$501	\$547	\$670
1988	\$537	\$536	\$352	\$441	\$538	\$585	\$727
1989	\$563	\$603	\$370	\$459	\$564	\$644	\$757
1990	\$588	\$624	\$402	\$496	\$585	\$647	\$818
1991	\$613	\$657	\$415	\$532	\$596	\$665	\$834
1992	\$619	\$647	\$424	\$533	\$621	\$677	\$844
1993	\$650	\$719	\$457	\$532	\$652	\$731	\$911
1994	\$681	\$756	\$450	\$587	\$674	\$763	\$967
	Telephon	e Expenditure	s as a Percer	tage of Total	Household Ex	penditures	
1980 ¹⁶	1.9%	3.0%	2.6%	2.3%	2.2%	1.8%	1.5%
1981 ¹⁶	2.0%	2.9%	3.0%	2.5%	2.2%	2.0%	1.6%
1982 ¹⁶	2.0%	3.3%	3.2%	2.7%	2.2%	2.0%	1.5%
1983 ¹⁶	2.0%	3.5%	3.1%	2.8%	2.2%	2.0%	1.5%
1984	1.9%	3.2%	2.7%	2.4%	2.2%	1.8%	1.5%
1985	1.9%	2.9%	2.7%	2.4%	2.2%	1.8%	1.4%
1986	1.9%	3.0%	2.9%	2.6%	2.1%	1.8%	1.4%
1987	2.0%	3.1%	3.2%	2.6%	2.3%	1.8%	1.4%
1988	2.0%	3.2%	3.2%	2.6%	2.3%	1.8%	1.5%
1989	1.9%	3.3%	3.1%	2.6%	2.3%	1.9%	1.4%
1990	2.0%	3.3%	3.1%	2.8%	2.4%	1.9%	1.5%
1991	2.0%	3.3%	3.1%	2.8%	2.3%	1.8%	1.4%
1992	2.0%	3.3%	3.4%	2.8%	2.3%	1.9%	1.5%
1993	2.0%	3.5%	3.3%	2.7%	2.5%	2.0%	1.5%
1994	2.1%	3.4%	3.2%	2.8%	2.3%	2.0%	1.6%

The nationwide estimates for 1980 through 1983 were based on samples that did not include rural areas. In addition, the BLS did not begin integrating the diary and interview surveys until 1984. Accordingly, some caution should be used in comparing estimates for before and after 1984.

	Ar	nnual Expen		le 8C Telephone	Service by	Age	
			Age of	Head of House	hold		
	Under 25	25-34	35-44	45-54	55-64	65-74	over 74
		erage Expendi					0.0
1980 ¹⁵	\$248	\$343	\$401	\$415	\$319		
1981 ¹⁷	\$275	\$377	\$433	\$458	\$364		
1982 ¹⁷	\$266	\$389	\$436	\$484	\$391		
1983 ¹⁷	\$275	\$439	\$472	\$535	\$421		
1984	\$292	\$450	\$541	\$558	\$451	\$341	\$266
1985	\$323	\$449	\$535	\$576	\$473	\$377	\$298
1986	\$342	\$485	\$546	\$580	\$483	\$399	\$316
1987	\$381	\$504	\$586	\$607	\$521	\$401	\$328
1988	\$417	\$534	\$617	\$669	\$543	\$458	\$338
1989	\$396	\$583	\$640	\$719	\$567	\$486	\$360
1990	\$430	\$604	\$682	\$750	\$590	\$476	\$376
1991	\$471	\$629	\$684	\$803	\$641	\$487	\$376
1992	\$469	\$648	\$698	\$753	\$652	\$502	\$421
1993	\$512	\$687	\$734	\$782	\$707	\$520	\$441
1994	\$570	\$726	\$766	\$819	\$697	\$551	\$445
	Telephor	ne Expenditure	s as a Percer	tage of Total	Household Ex	kpenditures	
1980 ¹⁷	2.3%	2.0%	1.9%	1.8%	1.8%		
1981 ¹⁷	2.4%	2.0%	1.9%	2.0%	2.1%		
1982 ¹⁷	2.3%	2.1%	1.9%	2.1%	2.1%		
1983 ¹⁷	2.3%	2.2%	1.9%	2.1%	2.0%		
1984	2.2%	2.0%	1.9%	1.9%	1.9%	2.2%	2.4%
1985	2.3%	1.9%	1.8%	1.9%	1.9%	2.1%	2.3%
1986	2.4%	2.0%	1.7%	1.8%	1.9%	2.3%	2.6%
1987	2.7%	2.1%	1.9%	1.9%	2.0%	2.1%	2.7%
1988	2.5%	2.1%	1.9%	2.0%	2.1%	2.3%	2.5%
1989	2.4%	2.2%	1.8%	2.0%	2.0%	2.3%	2.3%
1990	2.6%	2.1%	1.9%	2.0%	2.0%	2.3%	2.4%
1991	2.8%	2.1%	1.9%	2.1%	2.0%	2.2%	2.4%
1992	2.7%	2.2%	1.9%	2.0%	2.1%	2.2%	2.4%
1993	2.9%	2.4%	2.0%	1.9%	2.1%	2.2%	2.4%
1994	3.1%	2.4%	2.0%	2.0%	2.1%	2.2%	2.3%

The nationwide estimates for 1980 through 1983 were based on samples that did not include rural areas. In addition, the BLS did not begin integrating the diary and interview surveys until 1984. Accordingly, some caution should be used in comparing estimates for before and after 1984.

		M (1) 5	Table 9A				
			enditures for Tolds with Tele				
	All Consumers	Urban	Rural		Census	Region	
	All Consumers	Consumers	Consumers	Northeast	Midwest	South	West
		A	verage Total Mor	thly Bill			
1980	\$29.60	\$29.60					
1981	\$32.80	\$32.80					
1982	\$34.20	\$34.20					
1983	\$37.80	\$37.80					
1984	\$39.60	\$40.70	\$33.60	\$38.70	\$36.00	\$41.70	\$41.80
1985	\$41.30	\$42.10	\$37.50	\$40.80	\$37.30	\$38.70	\$45.20
1986	\$42.50	\$42.90	\$39.50	\$41.40	\$39.40	\$44.50	\$44.40
1987	\$45.10	\$45.20	\$44.10	\$44.00	\$41.10	\$46.90	\$47.70
1988	\$48.30	\$48.70	\$45.60	\$46.10	\$44.00	\$50.20	\$52.10
1989	\$50.80	\$51.40	\$46.50	\$49.90	\$46.90	\$52.80	\$53.20
1990	\$52.90	\$53.20	\$50.40	\$51.90	\$48.10	\$56.20	\$54.00
1991	\$55.10	\$55.10	\$55.10	\$54.70	\$52.30	\$56.00	\$56.90
1992	\$55.30	\$55.60	\$53.00	\$55.70	\$51.90	\$56.40	\$56.90
1993	\$58.20	\$58.60	\$55.10	\$59.10	\$54.00	\$60.70	\$58.20
1994	\$61.30	\$61.70	\$58.60	\$61.30	\$58.40	\$62.50	\$62.80
	Mon	thly Expenditure	s for Toll and oth	ner Discretion	ary Services ¹⁷	•	
1980	\$20.90	\$20.90					
1981	\$23.10	\$23.10					
1982	\$23.40	\$23.40					
1983	\$26.20	\$26.20					
1984	\$26.20	\$27.30	\$23.20	\$25.30	\$22.00	\$27.00	\$31.30
1985	\$26.80	\$27.60	\$26.00	\$26.20	\$22.50	\$22.60	\$33.40
1986	\$26.40	\$26.80	\$26.40	\$24.80	\$23.20	\$27.00	\$31.10
1987	\$28.40	\$28.50	\$30.40	\$26.90	\$24.30	\$28.90	\$33.80
1988	\$31.70	\$32.10	\$32.00	\$29.10	\$27.20	\$32.40	\$38.20
1989	\$33.30	\$33.90	\$32.00	\$31.90	\$29.10	\$34.10	\$38.40
1990	\$35.10	\$35.40	\$35.60	\$33.00	\$30.10	\$37.00	\$40.10
1991	\$36.40	\$36.40	\$39.40	\$33.80	\$34.40	\$36.40	\$41.60
1992	\$36.60	\$36.90	\$37.30	\$34.60	\$33.90	\$36.80	\$41.70
1993	\$39.30	\$39.70	\$39.20	\$37.30	\$35.90	\$41.10	\$43.00
1994	\$42.30	\$42.70	\$42.60	\$39.30	\$40.30	\$42.80	\$47.70

Based on the percentage of households in the group with telephone service, as estimated by Census data. Data in the table are rounded to the nearest \$0.10.

These figures represent expenditures for toll service, connection charges, additional access lines, additional local service features such as touch-tone calling or call waiting, "900 service" calls, directory listing charges, information calls, inside wiring maintenance plans, etc. The values in the tables are monthly bills, less the average cost for private line rotary service with unlimited local calling, based on the Urban Rates Survey. Access charges are significantly lower in rural areas because exchanges are significantly smaller. Rural rates were estimated as the Urban Rates Survey averages, less \$3.00 per month. Similar adjustments might be warranted for low income and elderly households, reflecting lifeline rates.

Table 9B

Monthly Expenditures for Telephone Service by Households with Telephone Service by Race and Income¹⁸

	By Ra	ace	Household	ls grouped by tota	al income from lo	me from lowest to highest quintile		
	White & Other	Black	1	2	3	4	5	
		,	Average Total Mo	onthly Bill				
1984	\$39.10	\$48.20	\$31.10	\$32.70	\$37.90	\$40.60	\$53.10	
1985	\$41.00	\$47.60	\$33.70	\$34.10	\$39.50	\$42.90	\$52.90	
1986	\$42.30	\$48.80	\$35.20	\$35.40	\$40.00	\$44.80	\$55.80	
1987	\$44.70	\$51.50	\$35.00	\$37.30	\$43.80	\$46.60	\$56.30	
1988	\$48.10	\$53.80	\$36.30	\$40.50	\$46.70	\$49.90	\$61.00	
1989	\$50.20	\$60.40	\$37.90	\$42.00	\$48.90	\$54.90	\$63.60	
1990	\$52.40	\$62.30	\$41.10	\$45.30	\$50.60	\$55.00	\$68.50	
1991	\$54.40	\$65.60	\$42.60	\$48.60	\$51.40	\$56.10	\$69.80	
1992	\$54.50	\$64.00	\$43.70	\$48.40	\$53.40	\$57.10	\$70.70	
1993	\$57.20	\$70.30	\$46.80	\$48.00	\$55.80	\$61.50	\$76.30	
1994	\$60.20	\$73.50	\$45.70	\$53.20	\$58.20	\$64.40	\$81.10	
	Mc	onthly Expenditure	es for Toll and ot	her Discretiona	ry Services ¹⁹			
1984	\$25.70	\$34.80	\$17.70	\$19.30	\$24.50	\$27.20	\$39.70	
1985	\$26.50	\$33.10	\$19.20	\$19.60	\$25.00	\$28.40	\$38.40	
1986	\$26.20	\$32.70	\$19.10	\$19.30	\$23.90	\$28.70	\$39.70	
1987	\$28.00	\$34.80	\$18.30	\$20.60	\$27.10	\$29.90	\$39.60	
1988	\$31.50	\$37.20	\$19.70	\$23.90	\$30.10	\$33.30	\$44.40	
1989	\$32.70	\$42.90	\$20.40	\$24.50	\$31.40	\$37.40	\$46.10	
1990	\$34.60	\$44.50	\$23.30	\$27.50	\$32.80	\$37.20	\$50.70	
1991	\$35.70	\$46.90	\$23.90	\$29.90	\$32.70	\$37.40	\$51.10	
1992	\$35.80	\$45.30	\$25.00	\$29.70	\$34.70	\$38.40	\$52.00	
1993	\$38.30	\$51.40	\$27.90	\$29.10	\$36.90	\$42.60	\$57.40	
1994	\$41.20	\$54.50	\$26.70	\$34.20	\$39.20	\$45.40	\$62.10	

Tables 9A, 9B, and 9C show average monthly bills for households with service. Not all households have telephone service. Census data show that about 94% of households had telephone service at any given time in 1994. About 95% of the households in the expenditure survey reported telephone expenditures. The 94% figure represents households that had service at the time they were questioned by Census. The 95% figure represents households that paid for telephone service during the previous three months.

¹⁸ Based on the percentage of households in the group with telephone service, as estimated by Census data. Data in the table are rounded to the nearest \$0.10.

These figures represent expenditures for toll service, connection charges, additional access lines, additional local service features such as touch-tone calling or call waiting, "900 service" calls, directory listing charges, information calls, inside wiring maintenance plans, etc. The values in the tables are monthly bills, less the average cost for private line rotary service with unlimited local calling, based on the Urban Rates Survey. Access charges are significantly lower in rural areas because exchanges are significantly smaller. Rural rates were estimated as the Urban Rates Survey averages, less \$3.00 per month. Similar adjustments might be warranted for low income and elderly households, reflecting lifeline rates.

			Tab	le 9C			Table 9C										
	Mor	ithly Exp	enditures	for Telep	phone Sei	rvice											
	by Ho	usehold	s with Tel	lephone S	Service by	/ Age ²⁰											
			Age of I	Head of Ho	usehold												
	Under 25	25-34	35-44	45-54	55-64	65-74	over 74										
1984	\$31.60	\$40.90	\$49.20	\$50.70	\$39.60	\$29.50	\$23.30										
1985	\$34.60	\$41.00	\$48.80	\$52.60	\$41.50	\$32.80	\$26.00										
1986	\$36.10	\$43.80	\$49.30	\$52.40	\$42.20	\$34.70	\$27.40										
1987	\$40.20	\$45.50	\$52.90	\$54.80	\$45.50	\$34.80	\$28.50										
1988	\$43.30	\$48.10	\$55.50	\$60.20	\$47.50	\$39.60	\$29.30										
1989	\$41.00	\$52.40	\$57.50	\$64.60	\$49.40	\$42.10	\$31.10										
1990	\$44.10	\$54.40	\$61.40	\$67.50	\$51.30	\$40.90	\$32.20										
1991	\$48.50	\$56.50	\$61.50	\$72.20	\$55.50	\$41.80	\$32.20										
1992	\$47.70	\$58.00	\$62.50	\$67.40	\$56.50	\$43.10	\$36.00										
1993	\$51.20	\$61.20	\$65.40	\$69.70	\$60.80	\$44.50	\$37.70										
1994	\$56.30	\$64.80	\$66.60	\$73.20		\$47.50	\$38.40										
	Monthly Ex	kpenditure	s for Toll a	nd other Di	scretionary	Services 2	1										
1984	\$18.20	\$27.50	\$35.80	\$37.30	\$26.20	\$16.10	\$9.90										
1985	\$20.10	\$26.50	\$34.30	\$38.10	\$27.00	\$18.30	\$11.50										
1986	\$20.00	\$27.70	\$33.20	\$36.30	\$26.10	\$18.60	\$11.30										
1987	\$23.50	\$28.80	\$36.20	\$38.10	\$28.80	\$18.10	\$11.80										
1988	\$26.70	\$31.50	\$38.90	\$43.60	\$30.90	\$23.00	\$12.70										
1989	\$23.50	\$34.90	\$40.00	\$47.10	\$31.90	\$24.60	\$13.60										
1990	\$26.30	\$36.60	\$43.60	\$49.70	\$33.50	\$23.10	\$14.40										
1991	\$29.80	\$37.80	\$42.80	\$53.50	\$36.80	\$23.10	\$13.50										
1992	\$29.00	\$39.30	\$43.80	\$48.70	\$37.80	\$24.40	\$17.30										
1993	\$32.30	\$42.30	\$46.50	\$50.80	\$41.90	\$25.60	\$18.80										
1994	\$37.30	\$45.80	\$47.60	\$54.20		\$28.50	\$19.40										

Some households without service may be reporting calls from pay telephones or may have had service for only one or two months. Dividing the average annual telephone expenditures for all households by 12 and by the percentage of households with telephone service gives a reasonable estimate of the average monthly bill for households with service. This average was just over \$61 per month in 1994.

Based on the percentage of households in the group with telephone service, as estimated by Census data. Data in the table are rounded to the nearest \$0.10.

These figures represent expenditures for toll service, connection charges, additional access lines, additional local service features such as touch-tone calling or call waiting, "900 service" calls, directory listing charges, information calls, inside wiring maintenance plans, etc. The values in the tables are monthly bills, less the average cost for private line rotary service with unlimited local calling, based on the Urban Rates Survey. Access charges are significantly lower in rural areas because exchanges are significantly smaller. Rural rates were estimated as the Urban Rates Survey averages, less \$3.00 per month. Similar adjustments might be warranted for low income and elderly households, reflecting lifeline rates.

Tables 9A, 9B, and 9C also show monthly expenditures for toll and other discretionary services. This is the total monthly bill less the cost of a primary access line. The cost of the primary access line was based on the Urban Rates Survey residential rate averages for private line unlimited calling, including subscriber line charges, taxes, and surcharges. The balance of the monthly bill, amounting to \$42 per month in 1994, was for other services, such as toll service, connection charges, additional access lines, cellular service, additional local service features such as touch-tone calling or call waiting, "900 service" calls, directory listing charges, information calls, inside wiring maintenance plans, etc.

Data presented in Appendix 5 suggest that the bulk of these other monthly expenditures were for toll service. The revenues for most additional local services are reported to Account #5060 -- Other local exchange revenue. This account covers secondary features such as touch-tone service, call forwarding and call waiting; revenue from the provision of record message service and directory assistance; and non premises specific central office charges such as basic connection. Appendix 5 shows that the Local Exchange Carriers (LECs) report slightly over five dollars per month per access line for this account. Some miscellaneous local service revenue, such as charges for unpublished numbers and inside wiring maintenance, are recorded in other local service accounts. As of 1995, approximately 15% of residential customers have additional local access lines. An increasing number of residential customers have cellular service as well.

Data from the 1994 Annual Survey of Communication Services, published by the Bureau of the Census, indicates that residential customers spent \$23.7 billion for local service, \$36.9 billion for long distance service, and \$5.9 billion for network access before taxes. Thus approximately 55% of residential expenditures for telephone service are devoted to toll service. Census data shows that about 93 million households had telephone service in 1994. Dividing \$36.9 billion of toll expenditures by 93 million households suggests that the average household spent \$33.06 per month for toll service in 1994. A second estimate can be derived by multiplying the 55% percent expenditures for toll times the \$61.30 per month average telephone expenditure estimated by the consumer expenditure survey. This suggests that the average household spent \$33.72 per month for toll service in 1994.

Carriers filing FCC Form 431 TRS Fund worksheets reported that in 1994, about 65.9% of MTS revenues were interstate. See Telecommunications Industry Revenue: TRS Fund Worksheet Data, Industry Analysis Division, February 1996. Thus, it appears that the average household spent between \$21 and \$22 per month for interstate calls and about \$11 on intrastate toll calls.

The Annual Survey of Communication Services indicates that the carriers earned revenue of about \$22.27 a month from each residential access line in 1994. The Urban Rates Survey estimates that flat rate local phone service, before taxes, averaged \$16.83 and the low cost service with 50 local calls averaged \$13.15, before taxes in 1994. Taken as a whole, it appears that residential customers probably spend between \$5 and \$8

monthly per line for other local services such as connection charges and additional calling features in 1994.

Figure 14

Changes in Consumer Expenditures
since 1980

120.00%

100.00%

80.00%

40.00%

20.00%

Telephone Expenditures

All Expenditures

Figure 14 shows that telephone expenditures and overall household expenditures moved in concert between 1980 and 1994. The average household expenditures for telephone service rose by about 112% over this period, telephone rates, as measured by the CPI, rose by 60% over the same period. This suggests that slightly under one-half of the increase in household telephone expenditures was due to increased use of telephone service. The growth in household usage of telephone service was probably greater than this because the 1980 telephone expenditure data include equipment costs that are excluded from the

1994 data.

The nationwide monthly cost of local residential service was about \$19 in 1994, approximately \$9 higher than it was in 1980. The average household spent about \$42 each month for toll and other discretionary services in 1994, approximately \$21 more than in 1980. Some of the growth in other expenditures was due to the unbundling of inside wiring maintenance and to consumers adding features such as call waiting. Much of the increase, however, was for increased long distance calling. Toll rates rose between 1980 and 1983. Between the AT&T divestiture in 1984 and 1990, the cost of directly dialed interstate calls fell about 40%, and the overall cost of interstate service fell about 30%. It appears that households increased their use of toll services by about 10% a year during this period. Since 1990, it appears that residential toll usage has been increasing by 7% to 8% a year.

The data in Tables 8A through 9C allow some comparisons of telephone expenditures by demographic groups. Rural consumers have lower income and expenditure levels than urban consumers, but devote an equal percentage of expenditures to telephone service. Since 1984, telephone expenditures by rural households increased faster than expenditures by urban households. In 1994, rural households spent about as much for toll and discretionary services as urban households.

On average, black households spent more for telephone service than white and other households. Census data show that a smaller percentage of black households have

telephone service than other households. In November 1994, about 85.5% of black households subscribed to telephone service, compared with 95.2% for non-black households. Taken together, the telephone expenditure and penetration data suggest that black households with telephone service have significantly higher toll bills than white households. Table 9B shows that the average monthly bill for black households was \$73.50 in 1994, compared with \$60.20 for white and other households. It appears that, on average, black households with telephone service spend more on toll and other discretionary services.

Tables 8B and 9B show expenditure data for households grouped by reported income. Averages are shown for the lowest quintile or fifth of households to the highest. Table 9B shows that expenditures for telephone service are closely related to financial means. Lower income households are less likely to have telephone service, but as a group devote a higher percentage of total expenditures to telephone service than do higher income households. The percentage of expenditures devoted to telephone service have remained fairly constant for the two highest income quintiles. The percentage rose for the two lowest income quintiles in the early 1980s when telephone rates generally increased, and between 1985 and 1990, when the federal subscriber line charge was introduced and rose to \$3.50 per residential line. Nonetheless, the data suggest that nearly half of the telephone service expenditures made by low income households are for toll and other discretionary services.

The income averages estimated by the Consumer Expenditure Survey, and classifications of expenditures based on income, are not as reliable as other data provided by the Consumer Expenditure Survey. About 10% of households do not provide complete income information. Many households reporting low income have high expenditures, reflecting temporary declines in income, business losses for tax purposes, or the expenditure of savings by retired persons. At one time, the BLS published breakdowns by expenditure quintile. Thus, averages were calculated for the fifth of consumers with the lowest total expenditures, the next higher fifth, etc. Expenditure quintiles probably represent a better measure of household affluence than do income quintiles. The expenditure quintiles were also a flawed measure of affluence, however, because new car expenditures were recorded at the time of purchase, and car payments were excluded from expenditures. Other major installment purchases (except for housing) were treated similarly. Thus, a household's total expenditures would appear to be high in some years and low in other years. The 1986 averages by expenditure quintile show a greater disparity in telephone expenditures between the least affluent and most affluent households as compared to the expenditure averages by income quintile shown in Tables 8 and 9.

Tables 8C and 9C show telephone expenditure patterns for households grouped by age. Households headed by persons under 25, and by persons 65 and older devote a higher percentage of overall expenditures to telephone service than other households. Households headed by persons age 74 and older devote about half of the telephone expenditures to basic local exchange service.

Figure 15

Changes in Consumer Expenditures for

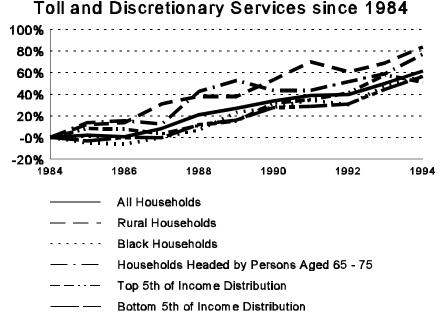


Figure 15 shows changes in expenditures and for toll other discretionary services for demographic several The graph groupings. illustrates the considerable variation in year-to-year changes. The figure suggests that virtually all groups have shown sustained increases in toll usage since 1987.

C on sumer Expenditure Survey data can be used to estimate the total residential market for telephone service. Multiplying the average household expenditures for telephone service by the

number of households gives the estimate that consumers spent \$70.5 billion for telephone service in 1994. This figure can be compared with statistics from two other sources.

The Census Bureau began conducting annual surveys of the communications service industry in 1990. The survey asks both local and toll communications carriers to provide Local Service, Toll Service, Access Service (including subscriber line services), Cellular Service, Directory Advertising, and Other Operating revenues. The final category includes miscellaneous and non-regulated services. Carriers are asked to divide local, toll, and access revenues between residential and business customers. Census estimated that in 1994, telephone companies received \$66.5 billion from residential customers for local, toll, and access services, representing about half of local service revenues, and about 40% of toll service revenues. The \$66.5 billion total is about \$5 billion less than the figure based on the Consumer Expenditure Survey estimate.

An estimate of residential expenditures is also available from the Bureau of Economic Analysis (BEA), which produces estimates of Personal Consumption Expenditures (PCE) as part of the national income and product accounts. The PCE measures the goods and services purchased by the private individuals and nonprofit institutions within the United States. The PCE for telephone service was \$79.8 billion for

1994. The substantial increase in the PCE for telephone service between 1993 and 1994 was for the most part due to the inclusion of expenditures on cellular service.

The three estimates of household expenditures for telephone service span a considerable range. Much of the differences can be attributed to differences in scope and methodology of the surveys. These differences are summarized in table 10.

Methods for Esti	Table 10 Methods for Estimating Household Expenditures on Telephone Service (1994)								
	Consumer Expenditure Survey	Personal Consumption Expenditures	Survey of Communication Services						
Expenditures	\$70.5 Billion	\$79.8 Billion	\$66.5 Billion						
Cellular Service	Included	Included	Not separately identified for residential *						
Inside Wiring Maintenance charges	Included	Included	Not separately identified for residential *						
CPE leases	Included	Included	Not separately identified for residential *						
Revenue basis**	Billed	Billed	Billed						
Coin Telephone traffic and calls charged to hotel or motel rooms	Not included	Included	Probably included with business						
900 service charges									
Taxes	Included	Included	Excluded						

^{*} The survey estimated total Cellular revenues of \$15.9 billion in 1994. Inside wiring maintenance, CPE lease and other deregulated revenues were included with the \$11.7 billion reported as Other operating revenue in 1994. The survey also reported a total of \$9.5 billion in directory advertising revenues.

The overall PCE is significantly higher than the total household expenditures estimated by the Bureau of Labor Statistics. The PCE includes expenditures on behalf of individuals made by charities and institutions. The PCE also includes some imputed interest on bank accounts, imputed rental amounts for housing, and medical payments of

^{**} U.S. Carriers billed \$12.9 billion for international telephone service in 1994, of which they paid \$7.2 billion to foreign carriers for settlements. Foreign carriers paid \$2.9 billion to U.S. carriers for settlements. Residential customers are thought to make about 2/3 of all international calls, though firms reporting in the Survey of Communication Services are likely to include settlements as revenue from business customers rather than residential customers.

behalf of individuals made by the government. In addition, households appear to under report many categories of expenditures in the BLS survey. Thus, while telephone expenditures represent 2.1% of expenditures reported by the Bureau of Labor Statistics, it represents only 1.7% of the PCE.

Figure 16
Share of Telephone Expenditures
in Consumers' Budgets
2.00%
1.50%
0.50%

The Personal Consumption Expenditure estimates are available for 1929 through 1995. Total PCE and PCE for telephone service are shown in Appendix 6. Figure 16 shows changes in the percentage of PCE devoted to telephone services. The percentage increased steadily between 1945 and 1975, a period during which the percentage of households with telephone service dramatically. increased percentage declined over the period 1982 through 1990, and increased since.

Figure 17 shows the share of

in telephone company total operating revenues from the Statistics of Communications

Telephone Expenditures as a Percent of Total Expenditures

0.00%

n telephone company total operating revenues

Figure 17

personal consumption expenditures Common Carriers. The revenue figures do not include data for interexchange carriers other than AT&T and Alascom, and even these two IXCs are not included in data from 1995. The PCE includes expenditures for equipment and taxes, which are also excluded from the revenue figures. While revenues from business customers increasing more rapidly than revenues from residential customers through 1980. revenue residential customers has since been increasing more rapidly than that of customers. This business consistent with findings of the Census Bureau. Residential customers continue to account for a large percentage of usage.

Tables 11A through 11D show household expenditure data for selected cities. Because the number of household interviews by city is small, the Bureau of Labor Statistics combines two years worth of data to calculate city averages. Even so, users are cautioned that the samples are small, and changes over time may be due to sample differences, rather than real changes in expenditure patterns. Because of this concern, the BLS stopped publishing telephone and other expenditure detail by city. Thus, 1991 remains the latest available year. As also noted above, 1984 was the first year when the published figures integrated data from the interview and the diary surveys. These factors may explain some of the large increases in expenditures in some cities for the 1984 to 1985 period.

		Table	11A						
	Consu	ımer Expend	iture Data I	y City					
		Northeast Cer							
	New York City	•	Boston	Pittsburgh	Buffalo				
	ili e	verage Househo	•						
1980-1981	\$18,187	\$17,938	\$17,517	\$16,484	\$14,426				
1982-1983	\$19,017	\$20,585	\$18,032	\$15,937	\$16,249				
1984-1985	\$24,907	\$24,073	\$24,004	\$20,586	\$19,120				
1986-1987	\$28,087	\$25,308	\$26,624	\$22,255	\$20,264				
1988-1989	\$31,412	\$29,564	\$30,361	\$22,723	\$22,283				
1990-1991	\$34,583	\$31,795	\$30,835	\$28,626	\$25,119				
	Averag	e Household Te	lephone Expe	nditures					
1980-1981	\$412	\$321	\$351	\$281	\$319				
1982-1983	\$492	\$354	\$272	\$312	\$378				
1984-1985	\$549	\$457	\$362	\$359	\$400				
1986-1987	\$638	\$426	\$401	\$447	\$440				
1988-1989	\$718	\$499	\$548	\$430	\$486				
1990-1991	\$770	\$622	\$584	\$500	\$539				
-	Telephone Expe	nditures as a Pe	rcentage of To	otal Expenditures	3				
1980-1981	2.3%	1.8%	2.0%	1.7%	2.2%				
1982-1983	2.6%	1.7%	1.5%	2.0%	2.3%				
1984-1985	2.2%	1.9%	1.5%	1.7%	2.1%				
1986-1987	2.3%	1.7%	1.5%	2.0%	2.2%				
1988-1989	2.3%	1.7%	1.8%	1.9%	2.2%				
1990-1991	2.2%	2.0%	1.9%	1.7%	2.1%				

	Table 11B Consumer Expenditure Data by City									
		South	Census Reg	gion						
	Washington, DC	Baltimore	Atlanta	Miami	Dallas- Fort Worth	Houston				
		Average Ho	ousehold Exp	enditures						
1980-1981	\$20,094	\$18,385	\$15,909	\$14,138	\$21,943	\$19,545				
1982-1983	\$22,249	\$19,973	\$21,121	\$18,319	\$28,289	\$20,256				
1984-1985	\$33,499	\$23,203	\$25,528	\$23,971	\$32,838	\$25,645				
1986-1987	\$34,418	\$24,163	\$28,715	\$27,279	\$28,561	\$28,798				
1988-1989	\$37,254	\$27,896	\$30,376	\$31,108	\$33,736	\$29,769				
1990-1991	\$38,560	\$33,208	\$34,163	\$32,053	\$33,500	\$32,298				
		Household T	elephone Ex	penditures						
1980-1981	\$370	\$369	\$353	\$355	\$407	\$388				
1982-1983	\$420	\$366	\$419	\$508	\$427	\$396				
1984-1985	\$622	\$435	\$538	\$528	\$527	\$492				
1986-1987	\$658	\$467	\$531	\$599	\$553	\$556				
1988-1989	\$666	\$509	\$566	\$688	\$698	\$620				
1990-1991	\$699	\$600	\$705	\$778	\$669	\$686				
	Telephone Ex	cpenditures a	s a Percenta	ge of Total Ex	penditures					
1980-1981	1.8%	2.0%	2.2%	2.5%	1.9%	2.0%				
1982-1983	1.9%	1.8%	2.0%	2.8%	1.5%	2.0%				
1984-1985	1.9%	1.9%	2.1%	2.2%	1.6%	1.9%				
1986-1987	1.9%	1.9%	1.8%	2.2%	1.9%	1.9%				
1988-1989	1.8%	1.8%	1.9%	2.2%	2.1%	2.1%				
1990-1991	1.8%	1.8%	2.1%	2.4%	2.0%	2.1%				

The Bureau of Labor Statistics changed the sample base in 1986, which could cause some differences between the 1984 to 1985 averages, and the 1986 to 1987 averages. Prior to 1986, the survey sample was selected based on 1970 census data. Starting with 1986, the survey sample has been selected based on the 1980 census. This affects the sample mix of center city verses suburban households. This may be responsible for some changes in expenditure averages for some cities.

Telephone expenditures are closely related to the overall level of household expenditures. During the 1990 - 1991 time period, average expenditures for telephone service ranged from \$500 in Pittsburgh to \$778 in Miami. Households in Pittsburgh, however, devoted 1.7% of total expenditures to telephone service compared with 2.4% for Miami, a smaller disparity.

	Table 11C										
		Cons	sumer Expe	enditure Dat	a by City						
			Midwest	Census Regio	n						
	Chicago	Detroit	Milwaukee	Minneapolis	Cleveland	Cincinnati	St Louis				
			Average Hou	sehold Expend	itures						
1980-1981	\$18,842	\$17,614	\$16,800	\$15,481	\$18,165	\$14,527	\$16,249				
1982-1983	\$20,420	\$20,329	\$18,329	\$19,970	\$18,713	\$15,973	\$16,973				
1984-1985	\$25,234	\$24,964	\$18,728	\$24,271	\$21,501	\$20,750	\$21,044				
1986-1987	\$28,217	\$25,248	\$22,717	\$26,735	\$26,331	\$24,135	\$24,950				
1988-1989	\$32,349	\$28,100	\$25,920	\$31,140	\$27,796	\$27,601	\$26,361				
1990-1991	\$32,568	\$29,732	\$27,843	\$34,801	\$26,960	\$27,781	\$27,743				
		Avera	ige Household	d Telephone Ex	penditures						
1980-1981	\$412	\$345	\$290	\$267	\$322	\$297	\$317				
1982-1983	\$428	\$483	\$276	\$336	\$363	\$341	\$349				
1984-1985	\$481	\$495	\$355	\$365	\$399	\$361	\$405				
1986-1987	\$569	\$555	\$434	\$462	\$452	\$411	\$463				
1988-1989	\$559	\$664	\$473	\$492	\$490	\$497	\$561				
1990-1991	\$660	\$665	\$538	\$524	\$525	\$528	\$592				
	Tel	ephone Exp	enditures as	a Percentage c	of Total Expend	ditures					
1980-1981	2.2%	2.0%	1.7%	1.7%	1.8%	2.0%	2.0%				
1982-1983	2.1%	2.4%	1.5%	1.7%	1.9%	2.1%	2.1%				
1984-1985	1.9%	2.0%	1.9%	1.5%	1.9%	1.7%	1.9%				
1986-1987	2.0%	2.2%	1.9%	1.7%	1.7%	1.7%	1.9%				
1988-1989	1.7%	2.4%	1.8%	1.6%	1.8%	1.8%	2.1%				
1990-1991	2.0%	2.2%	1.9%	1.5%	1.9%	1.9%	2.1%				

A substantial body of research demonstrates that there is a strong relationship between income and telephone expenditures. Most researchers have also generally concluded that the price elasticity for local telephone service is relatively low. A pooled cross section and times series regression was used to check whether the expenditure data and rate level data are consistent with these previous findings. The simple analysis that follows is not intended to quantify relationships, but rather, is used to substantiate rate and expenditure data presented in this report.

Table 11D															
Consumer Expenditure Data by City															
West Census Region															
	Los Angeles San Francisco San Diego Portland Seattle Honolulu Ancho														
	Average Household Expenditures														
1980-1981	\$19,561	\$20,850	\$18,665	\$16,865	\$18,195	\$18,584	\$22,664								
1982-1983	\$22,626	\$24,039	\$21,728	\$17,204	\$19,648	\$22,247	\$27,276								
1984-1985	\$28,157	\$30,376	\$25,053	\$20,664	\$23,879	\$26,803	\$30,472								
1986-1987	\$28,462	\$31,044	\$28,511	\$24,452	\$27,939	\$28,239	\$34,406								
1988-1989	\$33,482	\$36,087	\$33,351	\$26,721	\$30,915	\$33,425	\$39,923								
1990-1991	\$35,673	\$39,707	\$32,983	\$29,228	\$35,086	\$36,294	\$43,991								
Average Household Telephone Expenditures															
1980-1981	\$352	\$385	\$344	\$332	\$339	\$291	\$473								
1982-1983	\$447	\$506	\$437	\$364	\$387	\$368	\$561								
1984-1985	\$567	\$535	\$472	\$445	\$441	\$381	\$528								
1986-1987	\$558	\$507	\$510	\$500	\$486	\$465	\$576								
1988-1989	\$677	\$666	\$560	\$521	\$607	\$550	\$596								
1990-1991	\$748	\$608	\$608	\$585	\$607	\$533	\$683								
	Telepl	hone Expenditur	es as a Perce	entage of To	tal Expendi	tures									
1980-1981	1.8%	1.8%	1.8%	2.0%	1.9%	1.6%	2.1%								
1982-1983	2.0%	2.1%	2.0%	2.1%	2.0%	1.7%	2.1%%								
1984-1985	2.0%	1.8%	1.9%	2.2%	1.8%	1.4%	1.7%								
1986-1987	2.0%	1.6%	1.8%	2.0%	1.7%	1.6%	1.7%								
1988-1989	2.0%	1.8%	1.7%	2.0%	2.0%	1.6%	1.5%								
1990-1991	2.1%	1.5%	1.8%	2.0%	1.7%	1.5%	1.6%								

The regression used data from the twenty six cities, and for the years 1984/85, 1986/87, 1988/89 and 1990/91. The following is the resulting regression equation:

Telephone expenditures = $.0431 * (EXP)^{.8646} * (RATE)^{.0869} * (CONNECTION)^{.0881}$ where

EXP is the average household expenditures for all items, which has been used as a surrogate for income

RATE is the average cost of basic local service including subscriber charges and taxes

CONNECTION is the average cost of connection including taxes.

The regression has an R square of .68. The t statistics of the coefficients are 14.3 for the EXP variable, 2.5 for the RATE variable, and 2.7 for the CONNECTION variable. Differences in overall expenditure levels explain more than half of the city-to-city variation in telephone expenditures. This figure is probably high, because some of the city-to-city differences in overall expenditures and telephone expenditures are due to sampling error. If the sample for one city over represented affluent households, for example, both total

expenditures and telephone expenditures would be biased high. In any case, differences in household income is the greatest factor explaining differences in telephone expenditures rather than differences in local rates.

Households tend to spend more on telephone service in cities that have higher local rates and higher connection charges. However, differences in basic service and connection charges explain less than ten percent of the city-to-city variation in telephone expenditures. The regression implies a local service rate elasticity of -.1. The regression significantly overstates the local rate elasticity because differences in local rates may reflect, as well as explain, differences in telephone expenditure levels. Toll service covers a greater share of overall costs in states where toll usage is relatively high. As a consequence, local rates may be lower in these states. On the other hand, exchanges with larger local calling areas may have higher local rates to compensate for lower amounts of toll traffic. Appendix 5 shows that carriers have a greater disparity in local service revenues per access line than they do for overall revenues per access line. This suggests that these effects are significant and account for part of the local rate elasticities.

b. Business Expenditures for Telephone Service

The Bureau of Economic Analysis constructs Input-output accounts of the U.S. economy. These tables trace the dollar flows between sectors of the economy and are used to determine the impact of demand changes in one sector of the economy on other sectors of the economy. The Bureau of Economic Analysis bases the tables on data collected from the census of manufacturers, which is conducted every five years. The most recently published tables contain values for 1987, based on the 1987 benchmark. The 1987 benchmark tables were published in the July 1994 Survey of Current Business. The 1987 estimates were published in the April 1992 Survey of Current Business. These tables are published at the 2 and 3 digit Standard Industrial Classification (SIC) level. Data at the 6 digit level, representing 541 industries, is available in The 1987 Benchmark Input-Output Accounts of the United States, Government Printing Office, July 1994.

The Input-output tables provide data for the "communications except radio and television" industry. Appendix 8 contains 1987 values of the use of communications services by other sectors of the economy, and purchases from other sectors of the economy by communications businesses. Table A8-1 shows total output and the purchases of communications by each industry. For each dollar of final sales, U.S. industry spends about 1 cent for communications services. This varies widely by industry. The "food and kindred products industry", for example, spends less than .1 cent for each dollar of sales, and accounts for less than .3% of nationwide expenditures on telephone service. The "finance and insurance" industry spends about 1.7 cents for each dollar of sales, and accounts for 4.7% percent of telephone expenditures. Changes in telephone service rates can have a significant impact on industries with low profit margins as a

percentage of sales, such as "wholesale and retail trade", which spends 1.2 cents for each dollar of sales.

At the time of the 1987 benchmark survey, the communications industry derived 51% of its revenues from businesses and 38% from individuals. The balance was from gross private fixed investment, government purchases and exports. The Bureau of Economic Analysis categorizes net settlement payments to foreign countries as exports. According to BEA figures, the "wholesale and retail trade" industry purchased \$10.1 billion of communications in 1987 — representing 6.3% of communications industry sales. Three other industries spent more than \$4 billion for communications in 1987, excluding the communications industry itself. These were "finance and insurance"; "business and professional services except medical"; and "health, educational, and social services and nonprofit organizations". As noted above, consumers devoted about 2% of expenditures for telephone services. Overall, "communications excluding radio and television" represented about 1.7% of the gross domestic product (GDP).

Table A8-2 details the use of products and services by the communications industry. Purchased products and services represented about 41% of communications sales in 1987. The remaining 59% represented value added by the industry, and includes the cost of labor and return on investment. For each dollar of revenue, communications firms spend 4.14 cents for repair and maintenance construction; 1.35 cents for radio, TV, and communications equipment; 2.85 cents for business and professional services except medicinal; and 1.74 cents for real estate and rental. These figures show that the communications industry is not especially sensitive to price changes in any one industry.

7. LONG TERM TRENDS IN LOCAL RATES

Table 12 presents average residential and single-line business rates for 1983 through 1995. The averages show that local rates rose sharply between October 1983 and October 1984. The averages continued to rise through October 1989 principally due to the introduction of federal subscriber line charges. Since that time some carriers have increased local rates and simultaneously dropped touch-tone charges. However, state utility commissions have generally ordered more rate reductions than increases. Overall, local rates have shown relatively little increase since 1989. This is illustrated in Figure 18, which shows the breakdown of a residential customer bill for a touch-tone private line with unlimited calling.

Figure 18

Composition of Residential Rates
from Urban Rates Survey

\$25.00
\$15.00
\$10.00
\$5.00
\$1986 1987 1988 1989 1990 1991 1992 1993 1994 1995
Taxes, including 911 charges
Subscriber Line Charges
Touch Tone
Monthly Service

Table 12 National Averages for Local Telephone Rates															
	Rates as of October 15														
	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1 Residential rates ²²												1995		
					Reside	ential rate	es ²²								
Unlimited service SLC	\$10.50 \$0.00	\$12.10 \$0.00	\$12.17 \$1.01	\$12.58 \$2.04	\$12.44 \$2.66	\$12.32 \$2.67	\$12.30 \$3.53	\$12.39 \$3.55	\$13.10 \$3.56	\$13.12 \$3.55	\$13.22 \$3.55	\$13.28 \$3.55	\$3.54		
Taxes ²³	\$1.08	\$1.25	\$1.36	\$1.51	\$1.56	\$1.58	\$1.70	\$1.85	\$2.00	\$2.03	\$2.17	\$2.24	\$2.34		
Total	\$11.58	\$13.35	\$14.54	\$16.13	\$16.66	\$16.57	\$17.53	\$17.79	\$18.66	\$18.70	\$18.94	\$19.07	\$19.49		
Lowest generally available rate	\$5.37	\$5.62	\$5.75	\$5.96	\$5.81	\$5.67	\$5.67	\$5.68	\$6.18	\$6.22	\$6.43	\$6.47	\$6.68		
SLC Taxes ²⁵	\$0.00 \$0.56	\$0.00 \$0.58	\$1.01 \$0.70	\$2.04 \$0.84	\$2.66 \$0.94	\$2.67 \$0.91	\$3.53 \$1.03	\$3.55 \$1.15	\$3.56 \$1.28	\$3.55 \$1.31	\$3.55 \$1.45	\$3.55 \$1.50	\$3.54 \$1.56		
Total	\$5.93	\$6.20	\$7.46	\$8.84	\$9.41	\$9.25	\$10.23	\$10.38	\$11.02	\$11.08	\$11.43	\$11.52	\$11.79		
Connection ²⁴ Taxes ²⁵	\$35.01 \$1.75	\$43.71 \$2.19	\$44.32 \$2.22	\$45.63 \$2.28	\$44.04 \$2.20	\$42.94 \$2.11	\$42.71 \$2.24	\$43.06 \$2.32	\$42.00 \$2.19	\$41.52 \$2.18	\$41.38 \$2.21	\$41.26 \$2.27	\$40.91 \$2.42		
Total	\$36.76	\$45.90	\$46.54	\$47.91	\$46.24	\$45.05	\$44.95	\$45.38	\$44.19	\$43.70	\$43.59	\$43.53	\$43.33		
					Busin	ess Rat	es								
Representative rate ²⁵	\$29.16	\$32.74	\$33.42	\$34.26	\$33.71	\$31.03	\$31.06	\$30.97	\$32.29	\$32.45	\$32.70	\$32.25	\$32.46		
Touch-tone	**	**	**	**	**	\$2.45	\$2.43	\$2.35	\$1.84	\$1.71	\$1.67	\$1.21	\$0.97		
SLC	\$0.00	\$0.00	\$1.01	\$2.04	\$2.68	\$2.69	\$3.55	\$3.57	\$3.57	\$3.56	\$3.57	\$3.57	\$3.57		
Taxes 25	\$3.35	\$3.77	\$3.96	\$4.17	\$4.18	\$3.95	\$4.21	\$4.32	\$4.42	\$4.57	\$4.63	\$4.61	\$4.77		
Total	\$32.51	\$36.51	\$38.39	\$40.47	\$40.57	\$40.12	\$41.25	\$41.21	\$42.12	\$42.29	\$42.57	\$41.64	\$41.77		
charge for five- minute local call	\$0.08	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09		
Connection 26	\$56.04	\$68.84	\$70.82	\$72.94	\$72.15	\$70.48	\$71.05	\$71.36	\$72.75	\$72.55	\$71.41	\$69.88	\$67.87		
Touch-tone Taxes ²⁵	** \$3.08	** \$3.79	** \$3.90	** \$4.01	** \$3.97	\$2.03 \$3.92	\$1.70 \$4.06	\$1.89 \$4.15	\$1.13 \$4.32	\$1.19 \$4.33	\$1.17 \$4.25	\$0.92 \$4.13	\$0.27 \$4.18		
Total	\$59.12	\$72.63	\$74.72	\$76.95	\$76.12	\$76.43	\$76.81	\$77.40	\$78.20	\$78.07	\$76.83	\$74.93	\$72.32		
five-minute payphone call	\$0.17	\$0.21	\$0.22	\$0.22	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.24	\$0.25		

²² The residential rates shown in this table do not include additional charges for touch-tone service.

²³ Taxes include 911 charges

²⁴ Connection charges do not include drop line and block charges. Residential connection charges do not include additional charges for touch-tone service. Business connection charges for 1983 through 1987 include the additional connection charge for installing touch-tone service. The charge is shown separately thereafter.

The representative rate is the single line rate for unlimited service where that service is offered, and the measured service rate plus additional charges for the first 200 five minute messages in other cities. The representative business rate includes the additional monthly cost for touch-tone service for 1983 through 1987. The additional charge is shown separately thereafter.

Figure 19

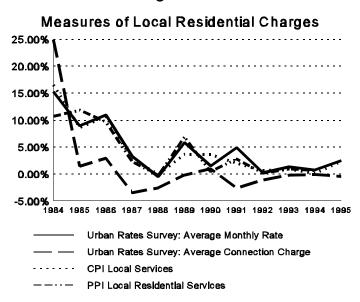
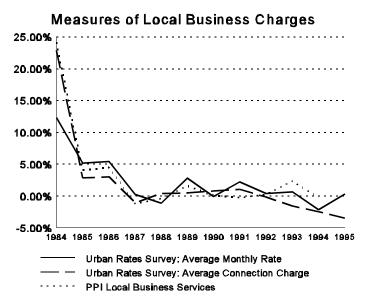


Figure 20



Changes in the 95 city are reasonably averages consistent with changes published index levels. This is illustrated by Figure 19 and Figure 20. Figure 19 shows October to October percentage changes in residential averages, and corresponding changes in the CPI and PPI residential local service indices. Figure 20 shows October to October percentage changes in single line business the averages. and corresponding changes in the PPI business local service index.

Table 12 also shows the nationwide average pay phone rates at company-owned pay phones. Charges ranged from 10 cents in 5 of the sample cities, to Pascagoula, 50 cents in Mississippi. Local exchange company pay phone rates may be different in different parts of the same city. The most common charge is 25 cents in 69 of the sample cities. The most unusual rate is in North Carolina, where tariffed rate is \$.2427. Southern Bell actually collects 25 cents per call in the state.

AT&T produced estimates of the average rate for residential service for January 1 of each

year, 1940 through 1983. For much of that period AT&T compiled rates in the same cities covered by the Industry Analysis Division's Urban Rates Survey. The AT&T rate was calculated as an unweighted average of rates for the sample cities. The AT&T estimates include any separate charges for a primary instrument, but do not include taxes. In addition, local service prior to 1984 included costs associated with maintaining inside wiring. Appendix 6 shows the AT&T estimates for 1940 to 1983. Appendix 6 also shows the October 15 Urban Rates Survey averages from 1983 to the present. The Urban Rates

Survey averages included in Appendix 6 do not include taxes, the cost of customer premises equipment, or the cost of an inside wiring maintenance plan.

Figure 21

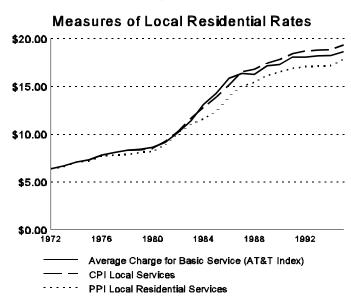


Figure 22

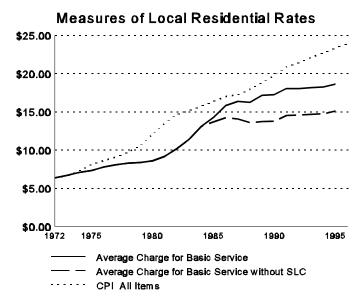


Figure 21 shows three measures of the cost of residential local service. The first series is the AT&T estimate of the charge for basic service. The series was extended to the present using the year-to-year percentage changes in the Urban Rates Survey estimates. The graph also shows the CPI and PPI local service indices, rebased to appear on the same scale. While all three measures show general agreement, the average charge for basic service and the CPI series show a particularly close correlation.

Figure 22 also shows the estimated charge for basic service. The graph shows what the basic service charge would have been if it had increased at the rate of overall inflation. In addition, the graph shows the basic service charge with the federal subscriber line charge removed. Once the effects of subscriber line charges are removed, it is apparent that basic local rates consistently rose by less than overall inflation.

8. Long Term Trends in Toll Rates

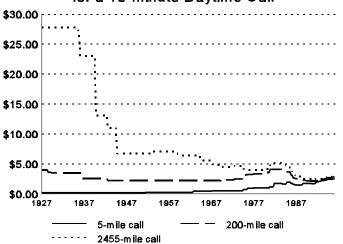
For many years, the Bell System provided most of the nation's long distance service on a monopoly basis. Although competitors began providing MTS in the 1970s, AT&T retained 90% of the long distance market at the time of the AT&T divestiture in 1984. Until relatively recently, most service was billed in accordance with a single rate schedule. Accordingly, this section primarily focuses on the AT&T basic MTS schedule. Over the past few years, however, discount plans have become more prevalent, thus some of the current discount plans are discussed here.

Table 13 provides rate information for AT&T station-to-station interstate calls for December 1927 to the present. The table shows the date each AT&T tariff became effective, and the day and night rates for 10 minute calls for nine specific distances. These nine mileages represent the midpoints of the current rate bands under 3000 miles. Through 1969, the table shows rates for station-to-station calls regardless of whether the call was directly dialed by the customer or placed by an operator since the caller paid the same rate in either case. Thereafter, the table shows rates for customer dialed calls. AT&T first offered discounts for directly dialing interstate calls in 1970. However, customers were already directly dialing a majority of toll calls then. Both business and residential customers paid these rates through June 1993. Thereafter, AT&T tariffed business rates separately. The rates in Table 13 do not reflect any volume discount plans.

Figure 23 shows the day rate charges over time for three distances -- 5 miles, 200 miles, and 2455 miles. The 200 mile rate applied to calls between New York City and

Figure 23

AT&T Basic Residential Rate
for a 10-minute Daytime Call



Washington, DC. The 2455 mile rate applied to calls between New York City and Los Angeles. At one time telephone rates were extremely distance sensitive. In 1927, a coast to coast call cost 100 times more than the shortest distance interstate toll call. Today, the rates are not especially distance sensitive. A day rate coast to coast call costs 31 cents per minute while the shortest distance interstate day rate toll call costs 26 cents per minute. Customers using discount plans would pay significantly less than these amounts, and in some cases are charged a constant amount per minute regardless of distance.

Table 13
AT&T Interstate Residential Tariff Rates for 10-minute Calls

December 1,1977 \$8.00 \$0.00 \$0.00 \$9	AT&T Interstate Residential Tariff Rates for 10-minute Calls																		
December 1,1927 95.00 90	Effective Date																		Mile Call Night
	December 1,1927	\$0.20	\$0.20	\$0.30		\$1.05		\$2.05		\$4.00		\$5.60		\$10.00		\$17.50	\$10.00	\$27.75	\$15.50
Jume 1,1935 1936 9329 9329 9335 935 935 936 937 939 93	February 1, 1929	\$0.20	\$0.20	\$0.30	\$0.30	\$1.05	\$1.05	\$2.05	\$1.05	\$3.60	\$2.00	\$5.05	\$3.00	\$9.05	\$5.00	\$15.50	\$10.00	\$27.75	\$15.50
	January 1, 1930	\$0.20	\$0.20	\$0.30	\$0.30	\$1.05	\$1.05	\$2.00	\$1.05	\$3.50	\$2.00	\$5.05	\$3.00	\$9.05	\$5.00	\$15.50	\$10.00	\$27.75	\$15.50
September 1,1936 30.00 30.00 30.05 30.05 30.05 30.05 30.00 30.05 30.00	June 1, 1935	\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$2.00	\$1.05	\$3.50	\$2.00	\$5.05	\$3.00	\$9.05	\$5.00	\$15.50	\$10.00	\$27.75	\$15.50
September 1, 1936 30.00 30.00 30.05 30.5 31.6 31.00 31.50 31.00 32.00 34.5 31.00 31.00 32.00 32.00 30.5 31.00 31.0		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$2.00	\$1.05	\$3.50	\$2.00	\$5.05	\$3.00	\$9.05	\$5.00	\$15.50	\$10.00	\$27.25	\$15.50
Jamuary 15, 1937 \$0.20 \$0.20 \$0.35 \$0.35 \$0.35 \$1.05 \$		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.55	\$1.05	\$3.50	\$2.00	\$4.55	\$2.60	\$8.00	\$4.60	\$15.00	\$9.05	\$23.00	\$15.00
May 1, 1940 1902 80.20 80.20 80.35 80.35 81.05 81.05 81.05 82.55 81.05 82.05 81.05		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.55	\$1.05	\$2.55	\$1.55	\$3.60	\$2.10	\$6.55	\$4.00	\$12.75	\$8.10	\$23.00	\$14.95
July 10, 1941 Perbarany 15, 1943 So.20 So.20 So.35 So.35 So.35 So.35 So.20 So.20 So.20 So.35 So.35 So.10 July 1, 1945 So.20 So.20 So.20 So.35 So.35 So.35 So.35 So.20 So.20 So.35 So.35 So.35 So.35 So.35 So.35 So.30 July 1, 1945 So.20 So.20 So.20 So.20 So.35 S		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.55	\$1.05	\$2.55	\$1.55	\$3.60	\$2.10	\$6.00	\$4.00	\$10.00	\$6.55	\$13.10	\$10.00
		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.55	\$1.05	\$2.55	\$1.55	\$3.50	\$2.10	\$5.50	\$4.00	\$9.55	\$6.55	\$13.10	\$10.00
Day 1, 1945		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.20	\$1.05	\$2.20	\$1.20	\$2.80	\$1.75	\$4.45	\$3.30	\$7.80	\$5.50	\$11.00	\$8.25
Perfungn 1, 1946 S0.20 S0.20 S0.25 S0.50 S0.50 S0.50 S0.50 S1.05 S	II - I	\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.20	\$1.05	\$2.20	\$1.20	\$2.80	\$1.75	\$4.45	\$3.30	\$6.15	\$4.95	\$6.70	\$5.50
March 1, 1952 So.25 So.25 So.25 So.50 So.5		\$0.20	\$0.20	\$0.35	\$0.35	\$1.05	\$1.05	\$1.20	\$1.05	\$2.20	\$1.20	\$2.80	\$1.75	\$4.45	\$3.30	\$5.55	\$4.45	\$6.70	\$5.50
September 1, 1953 Soluti		\$0.25	\$0.25	\$0.50	\$0.50	\$1.05	\$1.05	\$1.25	\$1.05	\$2.20	\$1.20	\$2.80	\$1.75	\$3.95	\$2.85	\$5.55	\$4.45	\$6.70	\$5.50
Sept 19, 1959 5025 5025 50.55		\$0.25	\$0.25	\$0.50	\$0.50	\$1.05	\$1.05	\$1.60	\$1.10	\$2.20	\$1.65	\$3.15	\$2.20	\$4.30	\$3.30	\$5.90	\$4.80	\$7.05	\$5.85
April 4, 1963	II I			\$0.50		\$1.05	\$1.05			\$2.20		\$3.15	\$2.20			\$4.95		\$6.45	\$4.90
February 1,1965 80.45 80.45 80.45 80.55 80.55 81.05 81.05 81.05 81.05 82.25 81.65 81.05		\$0.45						\$1.60	\$1.10				\$1.65	\$4.25					\$2.75
November 1, 1968 50.45 50.55 5	II -			\$0.55			\$1.05	\$1.60	\$1.10	\$2.20		\$3.15	\$1.65	\$4.25	\$2.10	\$4.95		\$6.45	\$2.75
November 1, 1967 80.0 80.5		\$0.45	\$0.45	\$0.55	\$0.55	\$1.05	\$1.05	\$1.60	\$1.10	\$2.20	\$1.65	\$3.15	\$1.65	\$3.85	\$2.10	\$4.85	\$2.65	\$5.50	\$2.75
August 1, 1968 90.50 80.50 80.55 80.55 81.05 81.																			\$2.75
		\$0.50		\$0.55	\$0.55		\$1.05	\$1.60	\$1.10	\$2.20	\$1.65	\$3.15	\$1.65	\$3.75	\$2.10	\$4.35	\$2.60	\$4.85	\$2.75
February 1, 1970 S0.50 S0.45 S0.55 S0.45 S0.55 S0.45 S0.55 S																			\$2.15
January 26, 1971 S0.52 S0.31 S0.72 S0.38 S1.24 S0.75 S1.79 S1.05 S2.34 S1.46 S2.65 S1.55 S3.00 S3.05 S3.00 S1.55 S3.00 S				\$0.55	\$0.45	\$1.05	\$1.05	\$1.60	\$1.05	\$2.10	\$1.55	\$2.55	\$1.55	\$3.15	\$1.55	\$4.05	\$2.05	\$4.50	\$2.15
January 22, 1973 S0.52 S0.31 S0.72 S0.88 S1.04 S0.75 S1.08 S1.05 S2.08 S1.05 S2.09 S1.05 S2.05 S4.07 S1.05 S2.07 S1.07 S0.07 S					\$0.38		\$0.75		\$1.05		\$1.46	\$2.65	\$1.55	\$3.50	\$1.55	\$3.70	\$2.05	\$4.50	\$2.15
March 9, 1975 S0.70 S0.27 S1.02 S0.40 S1.95 S0.78 S2.75 S1.10 S3.15 S1.26 S3.35 S1.44 S3.56 S1.45 S3.96 S1.58 S4.16 S2.55 S2.55 S2.55 S2.55 S2.55 S2.55 S1.85 S3.56 S1.42 S3.76 S1.50 S3.96 S3.95 S3.96 S3.96 S3.96 S3.96 S3.96 S3.96 S3.9				-						-		1							\$2.15
February 29, 1976 S0.91 S0.36 S1.40 S0.56 S2.15 S0.86 S2.95 S1.18 S3.25 S1.30 S3.45 S1.38 S3.56 S1.42 S3.76 S1.50 S3.96 S1.00 S1.90										-									\$1.66
September 13, 1977 S1.00 S0.40 S1.31 S0.52 S2.24 S0.89 S3.04 S1.21 S3.34 S1.33 S3.54 S1.41 S3.56 S1.42 S3.76 S1.50 S3.96 S1.01 S1.01 S0.40 S1.11 S0.56 S2.75 S1.01 S3.67 S1.56 S3.45 S1.41 S3.74 S1.57 S1.50 S3.97 S1.58 S4.17 S1.01 S3.67 S1.01 S3.67 S1.01 S3.67 S1.01 S3.01 S3.01 S1.02 S3.03 S1.05 S3.05	· ·				\$0.56	\$2.15			\$1.18	\$3.25		\$3.45	\$1.38	\$3.56		\$3.76	\$1.50	\$3.96	\$1.58
June 6, 1980 S1.01 S0.40 S1.41 S0.56 S2.35 S0.94 S3.15 S1.26 S3.54 S1.41 S3.74 S1.49 S3.77 S1.50 S3.97 S1.58 S4.17 S4.97	•									-									\$1.58
June 28, 1981				\$1.41	\$0.56	\$2.35	\$0.94	\$3.15		\$3.54		\$3.74	\$1.49	\$3.77		\$3.97	\$1.58	\$4.17	\$1.66
April 2, 1982 S1.76 S0.70 S2.38 S0.95 S3.00 S1.20 S3.90 S1.66 S4.09 S1.63 S4.47 S1.74 S4.49 S1.79 S4.60 S1.51 S4.00 S1.61 S4.00 S1.74 S4.49 S1.79 S4.60 S1.71 S4.83 S4.71 S4.99 S2.59 S1.71 S4.83 S3.71 S1.00 S2.79 S1.11 S3.89 S1.54 S4.06 S1.62 S4.18 S1.67 S4.29 S1.71 S4.83 S3.71 S1.00 S3.00 S1.26 S3.89 S1.75 S3.77 S2.26 S0.99 S2.57 S1.13 S2.96 S1.30 S3.14 S1.38 S3.33 S1.66 S3.44 S1.51 S3.54 S1.55 S3.80 S3.90 S1.91 S2.26 S9.99 S2.57 S1.13 S2.96 S1.30 S3.14 S1.38 S3.33 S1.64 S3.49 S1.55 S3.80 S3.91 S3.17 S2.67 S1.13 S2.96 S1.30 S3.44	· ·	\$1.13	\$0.45	\$1.63	\$0.65	\$2.77	\$1.10	\$3.67	\$1.46	\$4.07	\$1.62	\$4.36	\$1.74	\$4.39	\$1.75	\$4.60	\$1.84	\$4.80	\$1.92
May 25, 1984		\$1.76		\$2.38	\$0.95	\$3.00	\$1.20	\$3.90	\$1.56	\$4.09	\$1.63	\$4.37	\$1.74	\$4.49		\$4.60	\$1.84	\$5.15	\$2.06
April 26, 1985 \$2.09 \$0.83 \$2.71 \$1.08 \$3.21 \$1.28 \$3.69 \$1.47 \$3.87 \$1.54 \$4.06 \$1.62 \$4.18 \$1.67 \$4.29 \$1.71 \$4.83 \$1.91 \$1.986 \$1.95 \$0.77 \$2.26 \$0.99 \$2.57 \$1.13 \$2.96 \$1.30 \$3.06 \$1.46 \$3.35 \$1.54 \$3.97 \$1.58 \$4.07 \$1.62 \$4.43 \$1.91 \$1.91 \$1.1986 \$1.75 \$0.77 \$2.26 \$0.99 \$2.57 \$1.13 \$2.96 \$1.13 \$2.95 \$1.29 \$3.14 \$1.38 \$3.33 \$1.46 \$3.44 \$1.51 \$3.54 \$1.55 \$3.80 \$3.19 \$1.11 \$1.986 \$1.75 \$0.77 \$2.26 \$0.99 \$2.57 \$1.13 \$2.95 \$1.29 \$3.14 \$1.38 \$3.33 \$1.46 \$3.44 \$1.51 \$3.54 \$1.55 \$3.80 \$3.19 \$1.11 \$1.987 \$1.58 \$0.74 \$1.99 \$0.93 \$2.20 \$1.03 \$2.49 \$1.17 \$2.67 \$1.25 \$2.86 \$1.34 \$3.30 \$1.46 \$3.44 \$1.51 \$3.54 \$1.55 \$3.80 \$3.19 \$1.99 \$1.19 \$1.79 \$0.89 \$1.99 \$0.99 \$2.18 \$1.17 \$2.67 \$1.25 \$2.86 \$1.34 \$3.06 \$1.43 \$3.16 \$1.48 \$3.28 \$1.11 \$1.986 \$1.47 \$0.73 \$1.79 \$0.89 \$1.99 \$0.99 \$2.18 \$1.19 \$2.56 \$1.20 \$2.55 \$1.27 \$2.74 \$1.37 \$2.76 \$1.38 \$2.88 \$1.90 \$2.95 \$1.99 \$1.99 \$1.19 \$1.19 \$1.990 \$1.71 \$0.88 \$2.01 \$1.04 \$2.21 \$1.14 \$2.20 \$1.14 \$2.30 \$1.19 \$2.31 \$1.20 \$2.31 \$1.20 \$2.41 \$1.25 \$2.50 \$1.30 \$2.50 \$1.30 \$2.59 \$1.19 \$1.19 \$1.70 \$0.97 \$2.01 \$1.10 \$2.21 \$1.14 \$2.20 \$1.14 \$2.20 \$1.10 \$2.21 \$1.20 \$2.30 \$1.19 \$2.31 \$1.20 \$2.31 \$1.20 \$2.30 \$1.20 \$2.39 \$1.26 \$2.50 \$1.30 \$2.50 \$1.30 \$2.50 \$1.10 \$2.11 \$1.990 \$1.71 \$0.97 \$2.01 \$1.10 \$2.21 \$1.20 \$2.15 \$1.20 \$2.15 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.39 \$1.26 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.10 \$1.19 \$1.19 \$1.70 \$0.97 \$2.01 \$1.10 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.49 \$1.30 \$2.20 \$1.10 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.30 \$2.30 \$1.30 \$2.30 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.50 \$1.30 \$2.		\$1.65	\$0.66	\$2.27	\$0.90	\$2.79	\$1.11	\$3.69	\$1.47	\$3.87	\$1.54	\$4.06	\$1.62	\$4.18	\$1.67	\$4.29	\$1.71	\$4.83	\$1.93
June 1,1985 S1,98 S0,79 S2,59 S1,03 S3,00 S1,20 S3,48 S1,39 S3,66 S1,46 S3,85 S1,54 S3,97 S1,58 S4,07 S1,62 S4,43 S4,191 S1,195 S0,77 S2,26 S0,99 S2,57 S1,13 S2,96 S1,30 S3,14 S1,38 S3,33 S1,46 S3,44 S1,51 S3,54 S1,55 S3,80 S1,91 S1,195 S0,77 S2,26 S0,99 S2,57 S1,13 S2,95 S1,29 S1,15 S1,33 S1,46 S3,44 S1,51 S3,54 S1,55 S3,80 S1,91 S1,18 S0,67 S1,88 S0,88 S2,99 S2,25 S1,29 S1,15 S2,56 S1,20 S2,55 S1,29 S1,38 S3,33 S1,46 S3,44 S1,51 S3,54 S1,55 S3,80 S1,91 S1,195 S1,88 S0,88 S2,99 S0,98 S2,49 S1,17 S2,67 S1,25 S2,86 S1,34 S3,46 S1,43 S3,16 S1,48 S3,28 S1,191 S1,195 S1,88 S0,88 S2,99 S0,98 S2,38 S1,11 S2,56 S1,20 S2,75 S1,29 S2,95 S1,38 S2,96 S1,39 S3,08 S2,91 S1,195 S1,195 S2,195 S1,195 S2,195 S1,295		\$2.09	\$0.83	\$2.71	\$1.08	\$3.21	\$1.28	\$3.69	\$1.47	\$3.87	\$1.54	\$4.06	\$1.62	\$4.18	\$1.67	\$4.29	\$1.71	\$4.83	\$1.93
June 1 1986	*	\$1.98	\$0.79	\$2.59	\$1.03	\$3.00	\$1.20	\$3.48	\$1.39	\$3.66	\$1.46	\$3.85	\$1.54	\$3.97	\$1.58	\$4.07	\$1.62	\$4.43	\$1.77
July 11, 1986 S1.75 S0.77 S2.26 S0.99 S2.57 S1.13 S2.95 S1.29 S3.14 S1.38 S3.33 S1.46 S3.44 S1.51 S3.54 S1.55 S3.79 S3.10 S1.98 S3.10 S1.98 S3.95 S4.10 S2.65 S4.26 S4.26 S4.26 S4.26 S4.26 S4.26 S4.27 S4.28 S4.2		\$1.75	\$0.77	\$2.26	\$0.99	\$2.57	\$1.13	\$2.96	\$1.30	\$3.14	\$1.38	\$3.33	\$1.46	\$3.44	\$1.51	\$3.54	\$1.55	\$3.80	\$1.67
July 1, 1987 S1.48 S0.69 S1.89 S0.88 S2.09 S0.98 S2.38 S1.11 S2.56 S1.20 S2.75 S1.29 S2.95 S1.38 S2.96 S1.39 S3.08 S3.08 S3.09 S1.99 S0.99 S2.18 S1.09 S2.45 S1.22 S2.55 S1.27 S2.74 S1.37 S2.76 S1.38 S2.88 S3.09 S2.88 S3.09 S2.18 S2.96 S1.39 S2.88 S3.09 S2.18 S2.96 S2.15 S2.31 S1.20 S2.41 S2.43 S1.16 S2.64 S1.26 S2.64 S2.65 S2.75 S2.74 S2.74 S2.77 S2.74 S2.77	July 11, 1986	\$1.75	\$0.77	\$2.26	\$0.99	\$2.57	\$1.13	\$2.95	\$1.29	\$3.14	\$1.38	\$3.33	\$1.46	\$3.44	\$1.51	\$3.54	\$1.55	\$3.79	\$1.66
July 1, 1987 \$1.48 \$0.69 \$1.89 \$0.88 \$2.09 \$0.98 \$2.38 \$1.11 \$2.56 \$1.20 \$2.75 \$1.29 \$2.95 \$1.38 \$2.96 \$1.39 \$3.08 \$3.08 \$3.08 \$3.08 \$4.75 \$0.73 \$1.79 \$0.89 \$1.99 \$0.99 \$2.18 \$1.09 \$2.45 \$1.22 \$2.55 \$1.27 \$2.74 \$1.37 \$2.76 \$1.38 \$2.88 \$3.00 \$2.88 \$1.11 \$2.56 \$1.20 \$2.25 \$1.27 \$2.74 \$1.37 \$2.76 \$1.38 \$2.88 \$3.08	January 1, 1987	\$1.58	\$0.74	\$1.99	\$0.93	\$2.20	\$1.03	\$2.49	\$1.17	\$2.67	\$1.25	\$2.86	\$1.34	\$3.06	\$1.43	\$3.16	\$1.48	\$3.28	\$1.54
January 1, 1988 \$1.47 \$0.73 \$1.79 \$0.89 \$1.99 \$0.99 \$2.18 \$1.09 \$2.45 \$1.22 \$2.55 \$1.27 \$2.74 \$1.37 \$2.76 \$1.38 \$2.88 \$3.00 \$2.15 \$1.14 \$2.20 \$1.14 \$2.20 \$1.14 \$2.20 \$1.14 \$2.20 \$1.14 \$2.20 \$1.14 \$2.20 \$1.14 \$2.20 \$1.20 \$2.21 \$1.20 \$2.20 \$1.2		\$1.48	\$0.69	\$1.89	\$0.88	\$2.09	\$0.98	\$2.38	\$1.11	\$2.56	\$1.20	\$2.75	\$1.29	\$2.95	\$1.38	\$2.96	\$1.39	\$3.08	\$1.44
April 1, 1989 \$1.71 \$0.88 \$2.01 \$1.04 \$2.21 \$1.14 \$2.30 \$1.19 \$2.31 \$1.20 \$2.31 \$1.20 \$2.41 \$1.25 \$2.51 \$1.30 \$2.51 \$1.30 \$2.51 \$1.30 \$2.51 \$1.30 \$2.51 \$1.30 \$2.51 \$1.30 \$2.50 \$1.30	January 1, 1988	\$1.47	\$0.73	\$1.79	\$0.89	\$1.99	\$0.99	\$2.18	\$1.09	\$2.45	\$1.22	\$2.55	\$1.27	\$2.74	\$1.37	\$2.76	\$1.38	\$2.88	\$1.44
July 1, 1989 S1.71 S0.88 S2.01 S1.04 S2.21 S1.14 S2.21 S1.14 S2.30 S1.19 S2.31 S1.20 S2.40 S1.24 S2.50 S1.30 S2.50 S2.50 S1.30 S2.50	December 1, 1988	\$1.47	\$0.70	\$1.78	\$0.85	\$1.98	\$0.95	\$2.16	\$1.03	\$2.34	\$1.12	\$2.43	\$1.16	\$2.64	\$1.26	\$2.64	\$1.26	\$2.75	\$1.32
November 29, 1989 January 1, 1990 S1.71 \$0.97 \$2.00 \$1.10 \$2.21 \$1.20 \$2.15 \$1.20 \$2.15 \$1.21 \$2.30 \$1.22 \$2.40 \$1.26 \$2.50 \$1.30 \$2.50 \$1	April 1, 1989	\$1.71	\$0.88	\$2.01	\$1.04	\$2.21	\$1.14	\$2.30	\$1.19	\$2.31	\$1.20	\$2.31	\$1.20	\$2.41	\$1.25	\$2.51	\$1.30	\$2.51	\$1.30
January 1, 1990 \$1.71 \$0.97 \$2.00 \$1.10 \$2.01 \$1.20 \$2.15 \$1.20 \$2.15 \$1.21 \$2.30 \$1.22 \$2.39 \$1.26 \$2.50 \$1.30 \$2.50 \$1.30 \$2.49 \$1.30 \$2.40 \$1	July 1, 1989	\$1.71	\$0.88	\$2.01	\$1.04	\$2.21	\$1.14	\$2.21	\$1.14	\$2.30	\$1.19	\$2.31	\$1.20	\$2.40	\$1.24	\$2.50	\$1.30	\$2.50	\$1.30
July 1, 1990 \$1.71 \$0.97 \$1.97 \$1.10 \$1.97 \$1.20 \$2.15 \$1.20 \$2.15 \$1.20 \$2.15 \$1.20 \$2.15 \$1.20 \$2.15 \$1.21 \$2.30 \$1.22 \$2.39 \$1.26 \$2.49 \$1.30 \$2.40 \$1.30 \$2.40	November 29, 1989	\$1.71	\$0.97	\$2.01	\$1.10	\$2.21	\$1.20	\$2.21	\$1.20	\$2.30	\$1.21	\$2.31	\$1.22	\$2.40	\$1.26	\$2.50	\$1.30	\$2.50	\$1.32
January 1, 1991 \$1.71 \$0.97 \$1.80 \$1.10 \$1.95 \$1.20 \$2.10 \$1.20 \$2.10 \$1.21 \$2.30 \$1.22 \$2.30 \$1.26 \$2.48 \$1.30 \$2.49 \$1.71 \$1.05 \$1.80 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.48 \$1.33 \$2.49 \$1.30 \$2.49 \$1.30 \$1.10 \$1.70 \$1.05 \$1.80 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.44 \$1.33 \$2.49 \$1.30 \$2.49 \$1.30 \$2.40 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.20 \$1.20 \$2.30 \$1.25 \$2.30 \$1.30 \$2.44 \$1.33 \$2.45 \$2.30 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.45 \$2.30 \$1.30 \$2.40 \$1	January 1, 1990	\$1.71	\$0.97	\$2.00	\$1.10	\$2.01	\$1.20	\$2.15	\$1.20	\$2.15	\$1.21	\$2.30	\$1.22	\$2.39	\$1.26	\$2.50	\$1.30	\$2.50	\$1.32
February 16, 1991 \$1.71 \$1.05 \$1.80 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.48 \$1.33 \$2.49 \$1.10 \$1.70 \$1.05 \$1.80 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.44 \$1.33 \$2.45 \$1.10 \$1	July 1, 1990	\$1.71	\$0.97	\$1.97	\$1.10	\$1.97	\$1.20	\$2.15	\$1.20	\$2.15	\$1.21	\$2.30	\$1.22	\$2.39	\$1.26	\$2.49	\$1.30	\$2.49	\$1.32
July 1, 1991 \$1.70 \$1.05 \$1.80 \$1.13 \$1.90 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.44 \$1.33 \$2.45 \$1.30 \$2.45 \$1.30 \$2.44 \$1.33 \$2.45 \$1.30 \$2.40 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.10 \$1.22 \$2.30 \$1.25 \$2.30 \$1.30 \$2.44 \$1.33 \$2.45 \$2.20 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.20 \$1.30 \$2.44 \$1.33 \$2.45 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.30 \$2.30 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40	January 1, 1991	\$1.71	\$0.97	\$1.80	\$1.10	\$1.95	\$1.20	\$2.10	\$1.20	\$2.10	\$1.21	\$2.30	\$1.22	\$2.30	\$1.26	\$2.48	\$1.30	\$2.49	\$1.32
January 2, 1992 \$1.80 \$1.05 \$1.90 \$1.13 \$2.00 \$1.20 \$2.10 \$1.20 \$2.10 \$1.20 \$2.20 \$1.30 \$2.46 \$1.33 \$2.50 \$3.20		\$1.71	\$1.05	\$1.80	\$1.13	\$1.90	\$1.20	\$2.10	\$1.20	\$2.10	\$1.22	\$2.30	\$1.25	\$2.30	\$1.30	\$2.48	\$1.33	\$2.49	\$1.35
June 1, 1992 \$2.00 \$1.10 \$2.20 \$1.20 \$2.20	July 1, 1991	\$1.70	\$1.05	\$1.80	\$1.13	\$1.90	\$1.20	\$2.10	\$1.20	\$2.10	\$1.22	\$2.30	\$1.25	\$2.30	\$1.30	\$2.44	\$1.33	\$2.45	\$1.35
June I, 1992 \$2.00 \$1.10 \$2.20 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.30 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40	January 2, 1992	\$1.80	\$1.05	\$1.90	\$1.13	\$2.00	\$1.20	\$2.10	\$1.20	\$2.10	\$1.22	\$2.30	\$1.25	\$2.30	\$1.30	\$2.46	\$1.33	\$2.50	\$1.35
August 19, 1992 \$2.00 \$1.10 \$2.20 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.30 \$1.30 \$2.40 \$1.30 \$2.50 \$2.50 \$2.50 \$2.20		\$2.00	\$1.10	\$2.20	\$1.20	\$2.20	\$1.20	\$2.20	\$1.20	\$2.20	\$1.30	\$2.30	\$1.30	\$2.30	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30
February 19, 1993 \$2.10 \$1.10 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.30 \$1.30 \$2.30 \$1.30 \$2.30 \$1.30 \$2.40 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00 \$1.30 \$2.50 \$3.00	11	\$2.00	\$1.10	\$2.20	\$1.20	\$2.20	\$1.20	\$2.20	\$1.20	\$2.20	\$1.30	\$2.30	\$1.30	\$2.30	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30
July 19, 1993 \$2.10 \$1.10 \$2.20 \$1.20 \$2.20 \$1.20 \$2.20 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.40		\$2.10	\$1.10	\$2.20	\$1.20	\$2.20	\$1.20	\$2.30	\$1.20	\$2.30	\$1.30	\$2.30	\$1.30	\$2.30	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30
August 16, 1993 \$2.20 \$1.10 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.50 \$1.30 \$2.50 \$1.30	July 19, 1993	\$2.10	\$1.10	\$2.20	\$1.20		\$1.20	\$2.30	\$1.20	\$2.30		\$2.30	\$1.30	\$2.30	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30
September 29, 1993 \$2.20 \$1.10 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.30 \$1.20 \$2.40 \$1.30 \$2.40 \$1.30 \$2.40 \$1.30 \$2.50 \$1.30 \$2.50 \$1.30	August 16, 1993	\$2.20	\$1.10	\$2.30	\$1.20	\$2.30	\$1.20	\$2.30		\$2.30		\$2.30	\$1.30	\$2.30	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30
	September 29, 1993		\$1.10	\$2.30	\$1.20	\$2.30	\$1.20	\$2.30	\$1.20	\$2.40	\$1.30	\$2.40	\$1.30	\$2.40	\$1.30	\$2.50	\$1.30	\$2.50	\$1.30
																			\$1.40
April 4, 1994 \$2.30 \$1.10 \$2.30 \$1.20 \$2.40 \$1.20 \$2.50 \$1.20 \$2.50 \$1.20 \$2.60 \$1.30 \$2.70 \$1.40 \$2.70 \$1.40 \$2.70																			\$1.40
			\$1.10			\$2.40		\$2.50				\$2.60	\$1.20	\$2.70		\$2.70	\$1.40	\$2.70	\$1.40
					\$1.30			\$2.60				\$2.70		\$2.70		\$2.70	\$1.40	\$2.80	\$1.50
	· ·																		\$1.60
				\$2.80	\$1.30			\$2.80	\$1.50	\$2.90		\$3.00	\$1.50	\$3.00		\$3.00		\$3.10	\$1.60

Figure 24

AT&T Basic Residential Rate for a

10-minute Daytime Call in Current Dollars

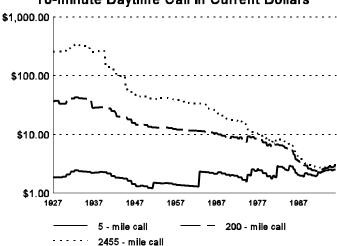


Figure 25

AT&T Average Residential

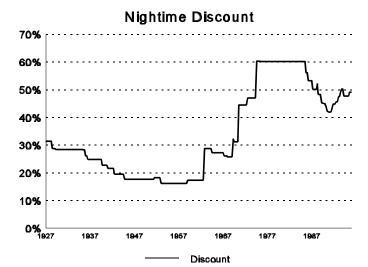


Table 13 and Figure 23 are based on published rates. A dollar in 1927, however, was worth considerably more than a dollar today. Figure 24 shows the rate trends in constant January 1996 dollars. Measured in today's dollars, a ten minute coast to coast call cost slightly over \$250 in 1927.

The December 1927 rate schedule established day rates for calls placed between 4:30 am and 7:00 pm, evening rates for calls placed between 7:00 pm and 8:30 pm, and night rates for calls placed between 8:30 pm and 4:30 am. The discount periods changed considerably over time. AT&T combined the evening and night periods in 1935. In 1963, AT&T reintroduced an evening rate period of 6:00 pm to 9:00 pm. AT&T did not offer discounts on daytime Saturday calls until 1965. Some subsequent schedules had two discount periods in the evening hours as well as a night rate period. The March 1975 tariff initiated the day, evening, and night periods now and instituted percentage discounts -- 35% for evening calls and 60% for night calls. AT&T stopped percentage discounts in 1989 and publishes separate evening, and night rates. Figure 25 shows the maximum percentage discount offered by year.

In addition to the night and evening discount rates, many long distance carriers offer other discount plans as well. Although normally directed to the high volume users, many of the plans offer discounts to those who spend as little as \$10 per month on long distance. There are numerous providers of long distance service.

The following discussion focuses on the discount plans of AT&T, MCI, and Sprint as of December 1996. Each of these three providers have several different discount plans available, depending on the type of customer and their calling patterns. Residential customers can choose their optimal calling plan from any of a number of plans depending on their volume of calls, the time of day they normally make the calls, and where the calls are placed to. The domestic discount plans are normally free to any presubscribed customer, while the international plans often have a small charge to receive the best discounts. For example, for domestic calls AT&T and MCI both give percentage discounts off their basic rates if a consumer spends more than \$10 per month. Sprint changed in 1994 to offer, as their main discount plan, a flat rate per minute for calls anywhere in the United States, with rates differing only by time of day. This plan, known as Sprint Sense, charges 25 cents per minute for daytime calls during the week and 10 cents per minute at all other times. Both AT&T and MCI have recently begun offering similar plans. The AT&T plan, known as AT&T One Rate charges 15 cents per minute for interstate calls regardless of the time of day, as does the MCI plan, known as MCI Minutes. In addition, many long distance companies are now offering additional discounts, rebates, or bonuses to customers who maintain the company as their primary interexchange carrier (PIC) for more than 7 to 12 months.

These discount plans are available to all consumers who call and request the plans. However, the customer must have chosen that carrier as their long distance company and request the plan. Many consumers do not receive these discounts simply because they have not asked their long distance provider for them. For a user spending \$10-\$15 per month, the savings over the course of a year currently amount to approximately \$25-\$40. High end users may see substantial savings in their total long distance expenditures as a result of these discounts. How much a consumer benefits from a discount plan depends on their calling patterns and the plan they choose.

One characteristic of discount plans is that they are continually changing. However, consumers are often allowed to remain on their existing discount plan, even though the plan is not accepting new members and the company is promoting another plan. Generally, carriers do not automatically switch customers to new or more desirable plans.

Special promotions are even more fleeting and change more often, making it difficult to keep track of the most recent offerings. However, some of these promotions result in substantial savings. These special promotions sometimes may be used in conjunction with other discount plans. Promotions usually run 90 days, but at times are continued for longer periods of time. In any event, it is important for the consumer to be aware of whether the promotion is in conjunction with their discount plan or instead of, as long term savings may be greater without the special promotion.

In addition to the discount plans and promotions offered by the major IXCs, consumers can find competitive rates offered by resellers, aggregators, and dial-around carriers. The key to saving on long distance charges lies in understanding the types of

calls being placed and choosing the calling plan of the carrier that offers low rates on these calls.

AT&T's basic MTS rate schedule provides separate rates for the initial period and for additional minutes. The initial period is currently a minute, and the charge is currently the same as the charge for additional minutes. Prior to 1975, however, customers were billed for minimum call lengths of 3 or more minutes even if the call lasted only a few seconds. In some cases, additional period rates covered 2 or more minutes.

Figure 26
First Minute Premium in

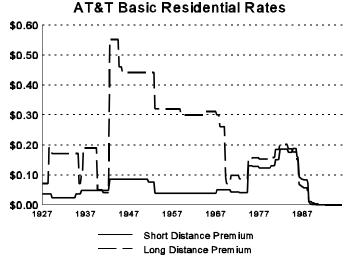
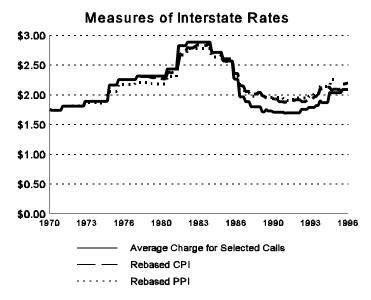


Figure 27



Furthermore, before 1990, the per minute initial period rate usually exceeded the rate for additional The difference between the rate for the initial period and the overtime period has varied dramatically over time. To permit comparisons over time, an initial minute premium was calculated as the initial period rate minus the per minute additional minute rate times the number of minutes in the initial period. Figure 26 shows how this premium changed over time. The figure shows average premiums for shorter distances -- representing an average premium for the four lowest mileages in Table 13, and for longer distances representing five highest average for the mileages in Table 13. Some competing carriers bill in 6 second increments, as opposed to 1 minute increments, while others bill a minimum of three minutes on all calls.

Directly dialed rates rose rapidly in the 1970s and then fell dramatically in the 1980s. This is illustrated in Figure 27, which shows three alternative measures of interstate toll rates. The first measure is the unweighted average cost of ten minute day rate and night rate calls for the three middle mileage bands. This average fell

about 40% between 1984 and 1990. This is probably representative of the overall decline of direct dial rates between these years. The graph also shows the CPI and PPI for interstate service, rebased to appear on the same scale. These indices have not fallen as much, since they cover charges for operator services as well as the charges for directly dialed calls. Operator service rates have tended to increase over time. Undiscounted direct dial rates have been increasing since 1992. The CPI, which now includes discount plans in its sample, shows lower increases since 1992, than do the PPI or the rate averages.



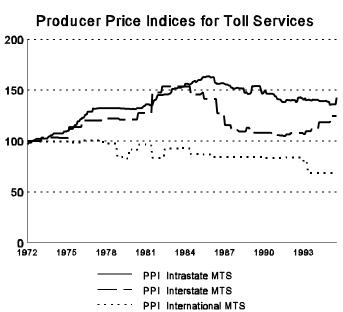


Figure 28 shows the PPI for interstate. intrastate. and international MTS. Interstate and largely intrastate service followed the same broad rate trends. The indices rose by similar amounts 1972 through divestiture. from Interstate rates declined rapidly in the years right after divestiture, in part because of the federal access charge policies. The most significant difference between interstate and intrastate rate changes has been due to the separations process prior to 1984, and the FCC's access charge policies thereafter.

Figure 28 shows that the PPI for international MTS has not followed the same pattern as the PPI

for interstate MTS and intrastate MTS. Appendix 7 explains that the international MTS index is not a pure measure of rates, since it also reflects the revenue effects of changes in international accounting rate agreements and international exchange rates. For example, the large decline in the PPI international index in 1993 appears due primarily to currency rate fluctuations. Trends in the International Communications Industry, Industry Analysis Division, August 1996, provides additional information on long term trends in international MTS rates.

Figure 29

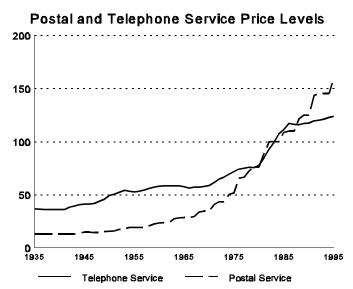
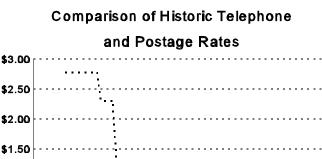
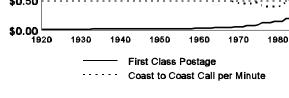


Figure 30





Over the long term, telephone service rates have risen more slowly than rates for most other goods and services, including postal service. The BLS maintains price indices for Telephone Services and for Postal Services as part of the CPI program. Figure 29 shows these indices from 1935 to the present. For residential customers, the overall cost of postal service has been rising at a much faster rate since about 1970 than before 1970. The cost of telephone service began increasing more rapidly in the 1980s, following a period of high inflation in the economy, and has increased more modestly since then.

Figure 30 compares the cost of a first class letter with the AT&T charges per minute for a coast to coast call. The comparisons are based on day rates for ten minute calls. In 1930, the cost per minute for a 200 mile call was about 10 times the cost of sending a first class letter. The cost per minute for a coast to coast call was about 100 times as expensive as a letter. At that time, however, telephone customers were charged for a 3 minute initial period. Thus in 1930, a day time coast to coast call would cost a minimum of \$7.50 compared with three cents for a first class letter. Today, it costs residential customers that are not

enrolled in a discount plan between 26 cents and 32 cents per minute to make a day rate call within the continental United States, and between 13 cents and 17 cents per minute to make a night rate call. A first class letter now costs 32 cents.

1990

Most of the information presented in this section concerns AT&T's basic schedule rates. AT&T's share of interstate switched access minutes has declined from 85% in 1984 to around 53% today. Appendix 10 compares AT&T's basic schedule rates with MCI and Sprint basic schedule rates. Figure 31 compares short haul rates (5, 16, and 39 mile

calls), Figure 32 compares medium haul rates (90, 200, and 334 mile calls), and Figure 33 compares long haul rates (678, 1418, and 2455 mile calls).

1995

Sprint

Residential Rate for a
10-minute Short Distance Call
\$2.00
\$1.50
\$1.50

\$0.00

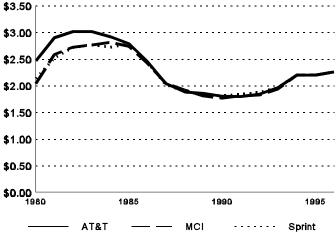
Figure 32
Residential Rate for a
10-minute Medium Distance Call

MCI

1990

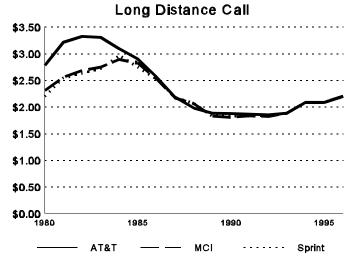
1985

AT&T



In 1980, MCI and Sprint had inferior access to the local switched network, paid significantly less than AT&T to originate and terminate calls, generally had lower basic and schedule rates. With the implementation of equal access, these carriers' basic schedule rates rapidly converged on AT&T's basic schedule rates. The CPI and PPI interstate MTS indices. which primarily track basic schedule rates. would show the same pattern of changes since divestiture if they fully weighted AT&T's competitors. However, the CPI and PPI MTS indices would have shown greater rate decreases since divestiture if the samples had greater coverage of discount rates. This reflects the fact that the interexchange carriers have increasingly attempted to attract customers by offering discount plans to customers with large toll bills.

Figure 33
Residential Rate for a 10-minute



Appendix 1: BLS Price Indices Table A1-1

		All	(1902 - 1904 - 100)		All
	All Goods	Telephone		All Goods	Telephone
	& Services	Services		& Services	Services
		Services			Services
1972 January	41.1	63.3	1975 January	52.1	69.8
February	41.3	64.4	February	52.5	70.1
March	41.4	64.4	March	52.5	70.1
April	41.5	64.5	April	52.7	70.7
May	41.6	64.7	May	53.2	70.9
June	41.7	65.1	June	53.2	71.2
	41.7	65.2		54.2	71.8
July	41.9	65.4	July		
August	42.0	65.6	August	54.3 54.6	72.2 72.4
September October	42.1	65.8	September	54.6	72.4 72.6
			October		
November	42.4	65.8	November	55.3	73.7
December	42.5	65.9	December	55.5	73.8
1973 January	42.6	65.6	1976 January	55.6	73.3
February	42.9	65.9	February	55.8	73.4
March	43.3	66.0	March	55.9	73.8
April	43.6	66.2	April	56.1	73.8
May	43.9	66.2	May	56.5	73.9
June	44.2	66.4	June	56.8	74.0
July	44.3	66.4	July	57.1	74.1
August	45.1	67.0	August	57.4	75.0
September	45.2	67.1	September	57.6	74.9
October	45.6	67.3	October	57.9	75.0
November	45.9	67.3	November	58.0	75.3
December	46.2	69.0	December	58.2	75.3
1974 January	46.6	69.2	1977 January	58.5	74.5
February	47.2	69.3	February	59.1	74.7
March	47.8	69.3	March	59.5	74.8
April	48.0	69.4	April	60.0	75.0
May	48.6	69.4	May	60.3	75.0
June	49.0	69.4	June	60.7	75.1
July	49.4	69.4	July	61.0	75.1
August	50.0	69.4	August	61.2	75.3
September	50.6	69.9	September	61.4	75.4
October	51.1	69.9	October	61.6	75.5
November	51.5	69.9	November	61.9	75.6
December	51.9	69.9	December	62.1	75.7

Appendix 1: BLS Price Indices Table A1-1

			All		Interstate	Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
1977	December	62.1	75.7	69.2	83.4	85.4
	January	62.5	75.7	69.2	82.9	85.5
10.0	February	62.9	75.8	69.8	82.7	84.9
	March	63.4	75.8	69.7	82.7	85.1
	April	63.9	76.0	70.0	82.6	85.6
	May	64.5	76.0	69.9	82.6	85.5
	June	65.2	76.0	69.9	82.7	85.5
	July	65.7	76.1	70.1	82.7	85.5
	August	66.0	76.3	70.4	82.7	85.6
	September	66.5	76.3	70.5	82.7	85.7
	October	67.1	76.2	70.1	82.7	85.6
	November	67.4	76.2	70.2	82.7	85.6
	December	67.7	76.4	70.2	82.7	86.5
1979	January	68.3	75.9	69.6	82.3	86.1
	February	69.1	75.7	69.5	82.1	86.0
	March	69.8	75.7	69.4	82.0	86.0
	April	70.6	75.7	69.4	82.0	86.0
	May	71.5	75.7	69.6	82.0	86.0
	June	72.3	75.6	69.2	82.1	86.4
	July	73.1	75.7	69.2	82.1	86.5
	August	73.8	75.9	69.5	82.2	86.6
	September	74.6	75.8	69.4	82.1	86.6
	October	75.2	75.1	68.3	82.1	86.8
	November	75.9	76.4	70.4	82.1	86.6
	December	76.7	76.9	71.4	82.1	86.6
1980	January	77.8	76.4	71.0	81.5	86.0
	February	78.9	76.1	71.0	81.2	84.3
	March	80.0	76.3	71.4	81.2	84.3
	April	81.0	76.4	71.6	81.2	84.5
	May	81.8	76.8	72.1	81.2	84.9
	June	82.7	77.6	72.8	83.0	85.0
	July	82.7	78.1	72.9	84.7	84.9
	August	83.3	78.2	72.9	85.0	85.3
	September	84.0	78.5	73.3	85.2	85.5
	October	84.8	78.8	73.7	85.2	85.5
	November	85.5	79.4	74.9	84.8	85.9
	December	86.3	80.4	76.4	84.9	86.1
1981	January	87.0	80.8	77.2	84.9	86.2
	February	87.9	81.6	78.5	84.9	86.4

Appendix 1: BLS Price Indices Table A1-1

			All	,	Interstate	Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
	March	88.5	81.6	78.6	84.9	86.4
	April	89.1	82.1	79.4	84.9	86.6
	May	89.8	82.5	79.9	84.9	86.8
	June	90.6	82.2	79.5	84.9	86.6
	July	91.6	84.3	80.7	91.0	86.6
	August	92.3	85.5	81.1	94.6	86.9
	September	93.2	87.3	83.3	95.8	88.7
	October	93.4	88.4	84.0	97.3	90.1
	November	93.7	89.1	85.4	97.3	89.9
	December	94.0	89.8	86.0	97.3	91.4
1982	January	94.3	90.0	85.8	97.4	93.2
	February	94.6	90.4	86.7	97.3	93.1
	March	94.5	90.8	86.9	98.2	93.0
	April	94.9	92.1	88.5	100.0	93.0
	May	95.8	92.6	89.2	100.1	93.3
	June	97.0	93.5	90.7	99.8	93.7
	July	97.5	93.8	91.2	99.8	93.9
	August	97.7	94.0	91.6	99.8	93.9
	September	97.9	94.8	92.9	99.8	94.0
	October	98.2	95.2	93.5	99.8	94.2
	November	98.0	95.4	93.6	99.8	94.8
	December	97.6	96.3	95.3	99.8	95.2
1983	January	97.8	98.1	97.2	100.9	97.3
	February	97.9	98.3	96.8	101.6	98.9
	March	97.9	98.5	97.0	101.6	99.3
	April	98.6	98.4	96.8	101.6	99.5
	May	99.2	98.9	97.5	101.6	100.0
	June	99.5	99.3	98.1	101.6	100.2
	July	99.9	99.5	98.1	101.7	100.9
	August	100.2	99.6	98.3	101.7	101.0
	September	100.7	99.9	98.6	101.7	101.2
	October	101.0	99.7	98.3	101.4	101.6
	November	101.2	100.4	99.5	101.4	102.3
	December	101.3	99.8	98.3	101.3	102.2
1984	January	101.9	105.0	106.7	101.3	104.2
	February	102.4	107.0	110.0	102.1	104.2
	March	102.6	106.4	109.1	102.1	104.1
	April	103.1	106.7	109.1	102.0	105.6
	May	103.4	106.9	109.5	102.3	105.1

Appendix 1: BLS Price Indices Table A1-1

			All	,	Interstate	Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
	June	103.7	107.1	110.7	98.9	106.5
	July	104.1	107.7	112.3	96.9	107.5
	August	104.5	107.9	112.9	96.8	106.6
	September	105.0	108.7	114.3	96.8	106.5
	October	105.3	108.8	114.5	97.0	106.5
	November	105.3	109.4	115.4	96.9	107.1
	December	105.3	109.0	115.2	96.9	105.9
1985	January	105.5	109.3	115.6	96.9	105.9
	February	106.0	108.3	113.8	96.9	105.8
	March	106.4	109.5	116.0	96.9	106.1
	April	106.9	109.4	115.8	96.9	106.0
	May	107.3	109.6	116.0	97.4	105.8
	June	107.6	112.1	121.3	94.7	106.2
	July	107.8	112.9	123.0	93.1	107.5
	August	108.0	113.6	123.9	93.3	107.8
	September	108.3	113.7	124.2	93.3	107.8
	October	108.7	113.8	124.3	93.3	108.0
	November	109.0	114.2	125.2	93.3	107.9
	December	109.3	114.1	125.5	93.3	106.5
1986	January	109.6	114.6	126.2	93.3	106.7
	February	109.3	114.8	126.4	93.3	107.0
	March	108.8	115.3	127.2	93.3	107.1
	April	108.6	116.5	129.5	93.3	106.8
	May	108.9	116.5	129.5	93.3	106.9
	June	109.5	118.7	135.6	88.0	106.7
	July	109.5	118.7	137.0	84.7	106.7
	August	109.7	118.8	137.2	84.4	107.0
	September	110.2	118.3	136.5	84.4	106.5
	October	110.3	118.9	137.5	84.4	106.8
	November	110.4	117.6	135.1	84.4	106.5
	December	110.5	117.2	134.4	84.5	106.8
1987	January	111.2	116.6	137.6	77.1	107.0
	February	111.6	116.4	137.5	77.1	106.4
	March	112.1	116.4	137.4	77.1	106.4
	April	112.7	116.7	138.2	77.0	106.3
	May	113.1	116.4	138.1	76.7	105.2
	June	113.5	115.6	137.5	76.7	102.7
	July	113.8	116.6	141.0	73.4	104.0
	August	114.4	117.0	141.9	73.4	103.8

Appendix 1: BLS Price Indices Table A1-1

			Price indices All	(1302 -	Interstate	Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
	September	115.0	116.6	140.9	73.7	103.5
	October	115.3	117.0	141.3	73.7	104.1
	November	115.4	116.9	141.4	73.7	103.6
	December	115.4	115.7	138.9	74.0	103.6
	January	115.7	115.8	139.9	72.2	104.1
	February	116.0	116.6	141.6	72.2	103.6
	March	116.5	116.2	141.1	72.0	103.2
	April	117.1	116.6	142.0	72.1	102.9
	May	117.5	116.6	142.0	72.1	102.8
	June	118.0	115.8	140.8	72.1	102.3
	July	118.5	115.8	141.4	72.1	100.3
	August	119.0	114.8	139.4	72.1	100.3
	September	119.8	115.6	140.6	73.1	100.0
	October	120.2	115.8	141.1	73.1	99.4
	November	120.3	115.7	140.9	73.1	99.4
	December	120.5	117.2	145.2	70.9	99.2
1989	January	121.1	116.8	145.0	70.9	97.4
	February	121.6	116.6	144.7	70.8	97.4
	March	122.3	116.2	144.1	70.8	96.9
	April	123.1	117.2	146.6	70.0	96.8
	May	123.8	117.9	147.8	69.8	97.4
	June	124.1	117.6	147.2	69.8	97.4
	July	124.4	117.8	147.8	69.6	97.0
	August	124.6	117.7	147.6	69.6	97.0
	September	125.0	117.8	147.9	69.6	96.9
	October	125.6	116.9	146.2	69.6	96.7
	November	125.9	117.2	146.8	69.6	96.8
	December	126.1	116.9	146.0	70.0	96.6
	January	127.4	117.6	148.4	69.1	95.2
	February	128.0	117.9	149.0	69.0	95.1
	March	128.4	118.2	149.7	69.0	95.0
	April	128.9	118.4	150.0	69.0	95.1
	May	129.2	118.0	149.2	69.0	95.2
	June	129.9	118.0	149.2	69.0	95.3
	July	130.4	115.5	145.4	67.4	95.4
	August	130.6	117.7	149.7	67.4	95.3
	September	132.7	117.9	150.1	67.4	95.2
	October	133.5	118.6	151.4	67.4	94.8
	November	133.8	118.6	151.4	67.4	94.7

Appendix 1: BLS Price Indices Table A1-1

			All	,	Interstate	Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
	December	133.8	116.4	147.5	67.4	94.5
1991		134.6	119.3	153.4	67.1	93.4
	February	134.8	119.2	153.2	67.1	93.4
	March	135.0	119.3	153.2	67.5	93.3
	April	135.2	119.3	153.4	67.5	92.9
	May	135.6	119.3	153.6	67.5	92.6
	June	136.0	119.5	153.6	67.5	93.1
	July	136.2	119.6	153.8	67.5	93.2
	August	136.6	119.7	154.1	67.5	93.2
	September	137.2	119.9	154.2	68.0	93.1
	October	137.4	120.0	154.5	68.0	92.9
	November	137.8	120.4	155.0	68.2	93.3
	December	137.9	120.5	155.0	68.3	93.1
1992	January	138.1	120.8	155.8	68.6	92.5
	February	138.6	120.8	155.8	68.6	92.2
	March	139.3	120.9	156.2	68.6	91.8
	April	139.5	120.8	156.2	68.6	91.4
	May	139.7	120.8	156.2	68.6	91.4
	June	140.2	119.9	154.7	68.2	91.2
	July	140.5	120.3	155.7	67.5	91.4
	August	140.9	120.1	155.4	67.6	91.2
	September	141.3	120.0	155.3	67.4	91.1
	October	141.8	120.0	155.4	67.4	91.0
	November	142.0	120.0	155.4	67.4	90.9
	December	141.9	120.1	155.7	67.4	90.9
1993	January	142.6	120.7	156.4	68.3	90.6
	February	143.1	120.7	156.3	68.3	90.6
	March	143.6	120.9	156.3	69.0	90.7
	April	144.0	120.3	155.3	69.0	90.5
	May	144.2	120.9	156.3	69.0	90.6
	June	144.4	120.7	156.0	69.0	90.3
	July	144.4	121.0	156.2	69.3	90.7
	August	144.8	121.2	156.3	70.1	90.7
	September	145.1	121.6	156.7	70.3	90.9
	October	145.7	121.8	156.8	70.8	91.0
	November	145.8	121.9	157.0	70.8	91.0
	December	145.8	122.3	157.2	71.8	91.1
1994	January	146.2	122.0	156.8	71.8	90.5
	February	146.7	123.3	156.9	75.6	90.5

Appendix 1: BLS Price Indices Table A1-1

		All Canada All		(1962 - 1964 - 100)		Intrastate
		All Goods	Telephone	Local	Toll	Toll
		& Services	Services	Services	Service	Service
	March	147.2	123.2	156.9	75.6	90.2
	April	147.4	123.0	156.8	75.3	90.0
	May	147.5	123.1	157.0	75.2	90.0
	June	148.0	123.3	157.2	75.3	90.3
	July	148.4	123.2	157.1	75.3	90.3
	August	149.0	123.3	157.1	75.6	90.3
	September	149.4	123.3	156.9	75.7	90.3
	October	149.5	123.2	156.9	75.7	90.2
	November	149.7	123.1	156.6	75.7	90.1
	December	149.7	123.1	156.7	75.7	90.2
1995	January	150.3	124.7	160.9	76.3	85.9
	February	150.9	123.8	160.4	74.3	85.6
	March	151.4	123.6	160.1	74.1	85.5
	April	151.9	123.7	160.0	74.9	85.5
	May	152.2	123.5	159.5	74.9	85.7
	June	152.5	124.0	160.5	74.9	85.5
	July	152.5	124.1	160.4	74.9	86.2
	August	152.9	123.9	160.2	74.9	86.0
	September	153.2	124.1	160.5	74.9	86.1
	October	153.7	124.2	160.5	74.9	86.8
	November	153.6	124.1	160.6	74.4	86.7
	December	153.5	124.6	160.7	75.8	86.8
1996	January	154.4	124.7	160.6	75.8	87.2
	February	154.9	124.7	160.7	75.8	87.2
	March	155.7	125.4	160.6	78.0	87.5
	April	156.3	123.5	156.8	78.0	88.0
	May	156.6	125.4	160.3	78.0	88.6
	June	156.7	126.0	161.0	78.4	88.9
	July	157.2	126.2	161.3	78.4	89.1
	August	157.4	126.5	161.3	78.4	90.9
	September	157.8	126.7	161.4	78.6	91.0
	October	158.3	126.9	161.9	78.6	91.0
	November	158.6	127.0	161.9	78.6	91.3
	December	158.6	127.2	162.1	78.6	92.1
1997	January	159.1	127.6	161.7	80.4	91.9

Appendix 1: BLS Price Indices Table A1-2

		Jed Produc	Local	Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
1972 January	98.6	98.1	97.7	97.8	99.5
February	99.0	99.1	98.9	98.7	100.4
March	99.0	99.1	98.9	98.7	100.4
April	98.8	99.7	99.5	99.8	100.4
May	99.3	100.6	100.7	100.7	100.4
June	99.8	100.8	100.9	100.8	100.9
July	100.5	100.8	100.9	100.8	100.9
August	100.5	99.6	99.7	99.3	99.4
September	100.7	100.5	100.7	100.8	99.4
October	100.2	100.5	100.7	100.9	99.4
November	101.0	100.5	100.7	100.9	99.4
December	101.9	100.5	100.7	100.9	99.4
1973 January	103.1	100.8	101.0	101.2	99.7
February	104.5	101.3	101.5	102.0	99.8
March	106.2	101.5	101.6	102.6	99.8
April	106.9	101.9	102.0	103.4	99.9
May	107.7	101.9	102.0	103.4	99.9
June	108.6	101.9	102.0	103.4	99.9
July	108.9	101.9	102.0	103.4	99.9
August	112.4	102.9	103.0	104.2	101.0
September	112.0	102.9	103.0	104.3	101.0
October	112.0	104.8	105.2	106.5	101.1
November	112.4	104.8	105.2	106.5	101.1
December	113.9	105.9	106.7	107.3	101.1
1974 January	117.2	107.4	108.1	109.2	103.3
February	119.4	107.7	108.3	109.8	103.6
March	120.1	107.7	108.3	109.8	103.6
April	121.1	107.7	108.3	109.8	103.6
May	122.5	107.7	108.3	109.8	103.6
June	122.7	107.7	108.3	109.8	103.6
July	126.3	107.7	108.3	109.9	103.6
August	128.5	109.2	109.4	112.2	106.0
September	129.7	109.2	109.3	112.4	106.0
October	132.3	109.6	109.7	113.4	106.0
November	134.4	109.6	109.7	113.4	106.0
December	134.7	109.6	109.7	113.4	106.0
1975 January	135.9	109.8	109.9	113.6	106.1
February	135.9	111.4	112.0	115.2	106.1

Appendix 1: BLS Price Indices Table A1-2

			Local	Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
March	135.4	111.6	112.2	115.3	107.4
April	136.4	111.6	112.2	115.3	107.4
May	137.3	111.9	112.4	115.6	107.4
June	138.5	112.0	112.5	115.9	107.4
July	140.2	112.8	113.4	117.3	107.5
August	140.4	113.1	113.6	117.8	107.5
September	141.6	114.1	114.8	119.1	107.9
October	143.3	114.1	114.8	119.1	107.9
November	143.3	115.4	116.2	120.4	109.0
December	143.5	115.4	116.2	120.5	109.0
1976 January	143.8	117.0	118.0	122.9	109.0
February	143.3	117.7	118.0	122.9	109.4
March	143.3	117.7	118.0	122.9	109.4
April	144.3	117.9	118.2	123.4	109.4
May	144.5	118.3	118.6	123.8	110.2
June	145.0	119.0	119.2	124.3	110.8
July	145.5	118.8	119.2	124.3	110.8
August	145.2	118.9	119.3	124.4	110.8
September	145.7	118.9	119.3	124.4	110.8
October	147.4	118.9	119.3	124.4	110.8
November	147.8	119.1	119.6	124.5	110.8
December	149.0	119.1	119.6	124.5	110.9
1977 January	149.8	119.1	119.6	124.5	110.9
February	151.2	117.6	118.3	121.0	110.9
March	152.2	118.2	119.0	121.9	110.9
April	153.3	118.4	119.3	122.1	110.9
May	154.5	118.4	119.3	122.1	110.9
June	154.8	118.5	119.3	122.2	111.1
July	155.5	118.4	119.1	122.1	111.1
August	155.5	118.4	119.1	122.1	111.1
September	156.2	118.4	119.1	122.1	111.1
October	157.9	118.4	119.1	122.1	111.1
November	158.4	119.1	120.1	122.9	111.1
December	159.1	119.5	120.5	123.4	111.2
1978 January	160.5	120.2	120.2	123.4	117.6
February	161.7	120.9	121.0	124.5	117.6
March	162.2	120.9	121.0	124.5	117.6
April	164.4	120.9	121.0	124.5	117.6

Appendix 1: BLS Price Indices Table A1-2

			er Price index Local	xes (1972 : Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
May	165.8	120.9	121.0	124.5	117.6
June	167.0	120.9	121.0	124.5	117.6
July	168.4	120.9	121.0	124.5	117.6
August	167.9	122.0	122.2	126.2	117.6
September	169.1	123.7	124.2	128.8	117.7
October	171.3	123.7	124.2	128.8	117.7
November	172.0	123.7	124.2	128.8	117.7
December	173.9	124.3	124.2	128.8	117.7
1979 January	176.3	124.3	124.0	128.8	117.7
February	178.5	123.9	123.6	128.2	117.7
March	179.7	123.0	122.5	127.5	117.7
April	181.6	123.0	122.5	127.5	117.7
May	182.8	123.0	122.5	127.5	117.7
June	183.5	123.0	122.5	127.5	117.7
July	185.4	123.0	122.5	127.5	117.7
August	186.6	123.3	122.8	127.8	117.7
September	189.5	123.9	123.5	128.8	117.7
October	192.6	124.4	124.0	129.5	117.7
November	194.3	124.4	124.0	129.5	117.7
December	196.2	126.1	126.2	131.6	117.7
1980 January	199.8	125.3	125.3	130.4	117.7
February	202.6	125.4	125.3	130.4	117.7
March	204.5	125.4	125.4	130.5	117.7
April	206.5	126.0	125.9	130.9	119.4
May	207.4	126.2	126.3	131.3	118.3
June	208.9	126.2	126.3	131.3	118.3
July	212.4	126.2	126.3	131.3	118.3
August	214.4	126.2	126.3	131.4	118.3
September	214.4	127.2	127.4	133.0	118.3
October	217.7	130.4	131.6	136.7	118.3
November	218.4	132.5	134.5	138.2	118.3
December	219.4	133.0	135.1	139.2	118.3
1981 January	222.5	133.4	135.6	139.6	118.5
February	224.4	135.3	137.0	141.4	123.1
March	226.8	135.6	137.3	141.6	123.1
April	228.9	136.3	138.2	142.8	123.1
May	229.9	138.0	140.0	144.1	123.8
June	230.6	138.0	140.0	144.1	123.8

Appendix 1: BLS Price Indices Table A1-2

Services		Discontini	ieu Flouuc	er Price index Local	xes (1972 : Local	
July		Finished	Local			
July 231.8 141.6 144.5 148.6 123.8 August 231.3 142.6 145.1 152.2 123.8 September 231.3 144.3 147.4 153.8 123.8 October 234.0 146.9 151.2 155.4 123.8 November 234.2 151.0 156.2 161.0 124.1 1982 January 236.8 149.5 154.9 157.7 124.1 February 236.8 149.5 154.9 157.7 124.1 March 236.4 149.5 154.9 157.7 124.1 April 236.4 149.5 154.9 157.7 124.1 May 236.8 152.3 157.3 160.1 124.2 June 238.5 153.3 158.4 161.4 124.2 July 240.2 153.3 158.4 161.4 124.2 August 240.7 153.7 159.0 162.0 124.2 <th></th> <th>Goods</th> <th>Services</th> <th></th> <th></th> <th>1</th>		Goods	Services			1
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February 242.1 162.9 169.0 171.2 125.9 March 241.6 163.4 169.5 172.2 125.9 April 241.4 163.1 169.2 172.0 125.7 May 242.3 163.2 168.4 171.5 125.7 June 243.1 163.3 169.1 172.3 126.2 July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5						
March 241.6 163.4 169.5 172.2 125.9 April 241.4 163.1 169.2 172.0 125.7 May 242.3 163.2 168.4 171.5 125.7 June 243.1 163.3 169.1 172.3 126.2 July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 April 248.3 171.2 177.7 183.7 124.3 April 248.3 171.9 177.7 183.7	1983 January					
April 241.4 163.1 169.2 172.0 125.7 May 242.3 163.2 168.4 171.5 125.7 June 243.1 163.3 169.1 172.3 126.2 July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 <td>February</td> <td>242.1</td> <td>162.9</td> <td>169.0</td> <td>171.2</td> <td>125.9</td>	February	242.1	162.9	169.0	171.2	125.9
May 242.3 163.2 168.4 171.5 125.7 June 243.1 163.3 169.1 172.3 126.2 July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 </td <td>March</td> <td>241.6</td> <td>163.4</td> <td>169.5</td> <td>172.2</td> <td></td>	March	241.6	163.4	169.5	172.2	
June 243.1 163.3 169.1 172.3 126.2 July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	April	241.4				125.7
July 243.5 163.8 169.6 173.1 126.2 August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	May	242.3	163.2	168.4	171.5	125.7
August 244.0 163.9 169.7 173.2 126.2 September 243.1 164.3 170.2 173.6 126.2 October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	June	243.1	163.3	169.1	172.3	126.2
September October 243.1 October 164.3 170.2 173.6 174.0 127.0 173.6 174.0 127.0 November December 244.5 164.8 170.6 174.1 127.0 127.0 164.8 170.6 174.1 127.0 127.0 174.1 127.0 1984 January February January Pebruary Pebru	July	243.5	163.8	169.6	173.1	126.2
October 245.2 164.7 170.5 174.0 127.0 November 244.5 164.8 170.6 174.1 127.0 December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	August	244.0	163.9	169.7	173.2	126.2
November December 244.5 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	September	243.1	164.3	170.2	173.6	126.2
December 244.7 164.8 170.6 174.1 127.0 1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	October	245.2	164.7	170.5	174.0	127.0
1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	November	244.5	164.8	170.6	174.1	127.0
1984 January 246.9 171.2 177.8 180.3 124.3 February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	December	244.7	164.8	170.6	174.1	127.0
February 247.8 171.2 177.8 180.3 124.3 March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	1984 January	246.9		177.8	180.3	124.3
March 248.3 171.2 177.7 180.5 124.3 April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	-					
April 248.3 171.9 177.7 183.7 124.3 May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3	_					
May 248.1 172.1 178.1 183.7 124.3 June 248.1 177.9 178.6 208.1 124.3						
June 248.1 177.9 178.6 208.1 124.3	'					
	_					
July 249.3 182.2 181.4 211.0 122.5	July	249.3	182.2	181.4	211.0	122.5
August 248.3 185.7 186.0 213.7 122.5	,					1

Appendix 1: BLS Price Indices Table A1-2

			Local	Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
September	246.9	187.6	188.7	215.8	122.5
October	248.6	187.7	188.7	215.9	122.5
November	249.3	187.5	188.3	215.9	122.5
December	248.8	187.6	188.4	216.0	122.5
1985 January	249.0	188.9	189.8	218.2	122.5
February	249.3	190.7	191.9	220.7	122.5
March	249.0	190.6	191.1	220.7	122.5
April	249.8	190.6	191.1	220.7	122.5
May	250.7	191.0	192.3	220.9	122.5
June	250.7	200.6	208.8	222.2	122.5
July	251.4	200.8	209.2	222.2	122.5
August	250.2	201.6	210.4	222.9	122.5
September	247.1	202.2	211.0	223.9	122.5
October	251.2	202.3	211.0	224.6	122.5
November	252.6	204.8	211.7	228.0	130.2
December	253.3	204.8	211.7	228.0	130.2
1986 January	252.4	206.5	213.4	230.8	130.3
February	248.8	206.7	213.6	231.3	130.3
March	245.5	206.7	213.6	231.3	130.3
April	244.7	206.7	213.6	231.3	130.3
May	246.2	206.7	213.6	231.3	130.3
June	246.7	216.6	230.3	234.0	130.3
July	245.2	216.6	230.3	234.0	130.3
August	245.7	216.9	230.8	234.1	130.3
September	245.0	217.5	231.3	234.6	131.5
October	247.8	217.5	231.3	234.6	131.5
November	247.8	216.8	230.5	233.6	131.5
December	247.6	216.8	230.5	233.6	131.5
1987 January	248.8	216.7	230.1	234.0	131.5
February	249.0	216.6	230.0	234.0	131.5
March	249.5	216.8	230.3	234.1	131.5
April	251.4	216.1	229.2	233.5	131.5
May	252.2	216.1	229.2	233.5	131.5
June	252.4	216.1	229.2	233.5	131.5
July	253.6	220.1	236.6	232.7	131.5
August	253.3	219.9	236.6	232.0	131.5
September	252.9	219.3	236.6	231.9	127.8
October	254.1	219.3	236.6	231.8	127.8

Appendix 1: BLS Price Indices Table A1-2

			er Price inde: Local	xes (1972 : Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
November	254.3	219.3	236.6	231.8	127.8
December	253.1	219.3	236.6	231.8	127.7
1988 January	254.3	218.5	235.9	230.2	127.7
February	253.8	218.2	235.5	230.3	127.7
March	254.3	218.4	235.7	230.6	127.7
April	256.0	218.4	235.7	230.6	127.7
May	257.2	218.4	235.7	230.6	127.7
June	257.7	218.3	235.7	230.6	127.7
July	259.8	217.9	235.1	230.0	127.7
August	260.0	218.1	235.4	230.3	127.7
September	259.8	218.2	235.4	230.2	127.7
October	261.7	219.5	235.9	230.8	127.7
November	262.7	219.5	236.0	230.8	127.7
December	263.2	226.4	247.4	233.0	127.7
1989 January	265.8	226.2	246.6	234.3	127.5
February	267.2	226.2	246.6	234.4	127.5
March	268.2	226.3	246.7	234.4	127.5
April	270.3	229.5	252.2	234.8	127.5
May	273.2	229.5	252.2	234.8	127.5
June	273.4	229.5	252.3	234.8	127.5
July	273.0	229.6	252.5	234.9	127.5
August	271.3	229.5	252.2	234.7	127.5
September	271.8	229.4	252.2	234.6	127.5
October	274.9	229.4	252.2	234.5	127.5
November	274.9	229.4	252.2	234.5	127.5
December	276.1	229.4	252.2	234.5	127.5
1990 January	281.3	229.3	252.7	234.0	126.1
February	280.9	229.7	253.1	234.3	126.1
March	280.4	229.6	253.1	234.3	126.1
April	280.4	229.4	252.7	234.3	126.1
May	281.6	229.4	252.8	234.3	126.1
June	281.8	229.4	252.8	234.3	126.1
July	282.8	229.5	252.8	234.5	126.1
August	285.4	229.5	252.8	234.5	126.1
September	288.0	229.5	252.8	234.5	126.1
October	292.6	229.8	253.3	234.6	126.1
November	294.0	231.4	256.0	234.6	126.1
December	291.9	231.4	256.0	234.6	126.1

Appendix 1: BLS Price Indices Table A1-2

			Local	Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
1991 January	292.6	232.6	258.9	232.6	126.1
February	290.4	232.6	258.8	232.6	126.1
March	289.2	232.6	258.9	232.7	126.1
April	289.7	232.8	259.1	232.7	126.1
May May	291.4	232.8	259.1	232.7	126.1
June	291.6	232.8	259.1	232.7	126.1
July	290.9	232.8	259.1	232.7	126.1
August	291.1	233.7	260.3	234.0	126.1
September	290.4	233.7	260.3	234.0	126.1
October	292.3	233.7	260.3	234.0	126.1
November	292.6	234.5	261.2	234.7	126.1
December	291.6	234.5	261.3	234.7	126.1
1992 January	291.4	234.3	261.0	234.7	126.1
February	292.1	234.3	261.0	234.7	126.1
March	292.3	234.3	261.0	234.7	126.1
April	292.8	234.3	261.0	234.7	126.1
May	294.7	234.3	261.0	234.7	126.1
June	296.4	234.3	261.0	234.7	126.1
July	295.9	234.1	260.7	234.6	126.1
August	295.7	234.1	260.7	234.6	126.1
September	295.0	234.1	260.7	234.6	126.1
October	297.6	234.1	260.7	234.6	126.1
November	296.7	234.1	260.7	234.6	126.1
December	296.2	234.1	260.7	234.3	126.1
1993 January	297.1	234.9	262.2	234.5	126.1
February	297.8	234.9	262.2	234.5	126.1
March	298.3	234.9	262.2	234.5	126.1
April	300.2	234.9	262.2	234.5	126.1
May	301.0	234.9	262.2	234.5	126.1
June	300.2	234.9	262.2	234.5	126.1
July	299.8	236.1	262.2	239.8	126.1
August	297.1	236.1	262.2	239.8	126.1
September	296.2	236.2	262.2	240.1	126.1
October	298.1	236.6	263.0	240.0	126.1
November	297.8	236.6	263.0	240.0	126.1
December	296.9	236.4	262.8	239.7	126.1
1994 January	297.8	236.9	263.3	240.6	126.1
February	298.6	236.9	263.3	240.6	126.1

Appendix 1: BLS Price Indices Table A1-2

			Local	Local	Local Optional
	Finished	Local	Residential	Business	Additional
	Goods	Services	Services	Services	Usage
March	298.8	236.9	263.3	240.6	126.1
April	299.0	238.1	265.2	240.7	126.1
May	299.8	238.0	265.0	240.5	126.1
June	300.5	238.0	265.0	240.5	126.1
July	301.4	237.7	264.7	240.0	126.1
August	302.6	237.7	264.7	240.0	126.1
September	300.5	237.6	264.7	239.3	126.1
October	301.0	237.6	264.7	239.3	126.1
November	301.7	237.6	264.7	239.3	126.1
December	301.9	237.6	264.7	239.3	126.1
1995 January	302.9	243.9	272.8	247.4	126.1
February	303.6	243.9	272.8	247.4	126.1
March	304.1	244.1	273.2	247.6	126.1
April	305.3	244.1	273.2	247.6	126.1
May	306.5	244.2	273.1	248.1	126.1
June	306.7	244.2	273.1	248.1	126.1
July	306.7	244.2	273.1	248.1	126.1
August	306.5				
September	306.0				
October	307.9				
November	307.9		Discor	ntinued	
December	308.9				
1996 January	309.6				
February	309.6				
March	311.2				
April	312.4				
May	313.4				
June	314.8				
July	314.6				
August	315.6				
September	316.0				
October	317.2				
November	318.4				
December	320.1				
1997 January	319.9				

Appendix 1: BLS Price Indices
Table A1-2

	Discontinu		`	,	
	Local Coin Service	Toll Service	Intrastate MTS	Interstate MTS	International MTS
1972 January	99.8	98.7	96.6	100.0	100.1
February	100.0	99.3	98.1	100.0	100.1
March	100.0	99.3	98.1	100.0	100.1
April	100.0	99.3	98.1	100.0	100.1
May	100.0	99.8	99.6	100.0	100.1
June	100.0	100.2	100.4	100.0	100.1
July	100.0	100.2	100.4	100.0	100.1
August	99.9	100.5	101.3	100.0	100.1
September	100.1	100.7	101.8	100.0	100.1
October	100.1	100.7	101.8	100.0	100.1
November	100.1	100.7	101.8	100.0	100.1
December	100.1	100.7	101.8	100.0	99.4
1973 January	100.1	100.7	101.9	100.0	99.4
February	100.1	102.4	102.1	103.2	99.4
March	100.1	102.5	102.1	103.2	99.4
April	100.1	102.5	102.1	103.2	99.4
May	100.1	102.5	102.1	103.2	99.4
June	100.1	102.5	102.1	103.2	99.4
July	100.1	102.5	102.1	103.1	99.4
August	101.5	103.4	104.2	103.1	99.4
September	101.5	103.4	104.2	103.1	99.4
October	103.4	103.8	105.4	103.1	99.4
November	103.7	103.8	105.4	103.1	99.4
December	103.8	104.3	106.3	103.1	99.4
1974 January	103.8	104.6	107.2	103.1	99.4
February	103.8	104.6	107.2	103.1	99.4
March	103.8	104.6	107.2	103.1	99.4
April	103.8	104.6	107.2	103.1	99.4
May	103.8	104.6	107.2	103.1	99.4
June	103.8	104.5	107.2	102.9	99.4
July	103.8	104.4	107.2	102.9	99.4
August	103.9	104.4	107.2	102.9	99.4
September	103.9	104.4	107.2	102.9	99.4
October	103.9	105.1	109.1	102.9	99.4
November	103.9	105.1	109.1	102.9	99.4
December	103.9	105.1	109.1	102.9	99.4
1975 January	103.9	105.4	109.8	102.9	99.4
February	103.9	105.4	109.8	102.9	99.4

Appendix 1: BLS Price Indices Table A1-2

	Local Coin Toll Intrastate			Interstate	International
	Service	Service	MTS	MTS	MTS
March	103.9	111.6	111.6	113.5	99.4
April	103.9	111.6	111.6	113.5	99.4
May	103.9	111.6	111.6	113.5	98.3
June	103.9	111.6	111.6	113.5	98.3
July	103.9	112.3	113.5	113.5	98.3
August	103.9	113.1	115.4	113.5	98.3
September	104.6	113.1	115.4	113.5	98.3
October	104.9	113.5	116.4	113.5	98.3
November	105.2	114.7	119.3	113.5	98.3
December	105.2	114.8	119.3	113.5	98.3
1976 January	105.7	115.4	121.0	113.5	98.3
February	114.6	115.6	121.4	113.5	98.3
March	114.6	119.6	122.6	120.2	99.0
April	114.6	119.6	122.6	120.0	100.5
May	114.6	120.4	124.7	120.0	100.5
June	114.6	120.8	125.7	120.0	100.5
July	114.6	120.8	125.7	120.0	100.5
August	114.7	122.0	128.6	120.0	100.5
September	114.7	122.0	128.6	120.0	100.5
October	114.7	122.0	128.6	120.0	100.5
November	114.7	122.0	128.6	120.0	100.5
December	114.7	122.0	128.6	120.0	100.5
1977 January	114.7	123.3	132.2	120.0	100.5
February	114.7	123.1	131.5	120.0	100.5
March	114.7	123.1	131.5	120.0	100.5
April	114.7	123.2	131.8	120.0	100.5
May	114.7	123.2	131.8	120.0	100.5
June	114.7	123.3	132.0	120.0	100.5
July	114.7	123.1	132.0	119.7	98.7
August	114.7	123.1	132.0	119.7	98.7
September	114.7	124.2	132.0	121.9	98.7
October	114.7	124.3	132.0	121.9	98.7
November	114.8	124.3	132.0	121.9	98.7
December	114.9	124.3	132.0	121.9	98.7
1978 January	115.0	124.3	132.1	121.9	97.1
February	115.0	124.2	132.0	121.9	97.1
March	115.4	124.3	132.0	121.9	97.1
April	115.4	124.3	132.0	121.9	97.1

Appendix 1: BLS Price Indices Table A1-2

	Discontinu	2 = 100)			
	Local Coin Service	Toll Service	Intrastate MTS	Interstate MTS	International MTS
May	115.4	124.3	132.0	121.9	97.1
June	115.4	124.3	132.0	121.9	97.1
July	115.4	124.3	132.0	121.9	97.1
August	115.5	124.3	132.0	121.9	97.1
September	115.6	124.3	132.0	121.9	97.1
October	115.6	124.3	132.0	121.9	97.1
November	115.6	123.8	132.0	121.9	84.0
December	124.7	123.9	132.1	121.9	84.0
1979 January	124.7	123.3	132.1	120.9	84.0
February	124.5	123.2	131.9	120.8	84.0
March	124.2	123.2	131.9	120.8	84.0
April	124.2	123.3	131.9	120.8	84.0
May	124.2	123.2	131.9	120.8	83.3
June	124.2	123.1	131.5	120.8	83.3
July	124.2	123.1	131.5	120.8	83.3
August	124.2	123.1	131.5	120.8	82.7
September	124.2	123.1	131.5	120.8	82.7
October	124.3	123.4	131.5	120.8	91.4
November	124.3	123.3	131.2	120.8	91.4
December	124.5	123.3	131.2	120.8	91.4
1980 January	124.5	123.4	131.5	120.8	90.9
February	124.5	123.2	131.1	120.8	90.9
March	124.5	123.2	131.1	120.8	90.9
April	124.5	123.4	131.3	120.8	90.9
May	124.5	123.6	132.1	120.8	90.9
June	124.5	127.5	132.2	127.4	96.6
July	124.5	127.5	132.2	127.4	96.2
August	124.5	127.5	132.2	127.4	96.2
September	124.8	127.5	132.2	127.4	96.2
October	124.8	127.9	133.2	127.4	96.2
November	124.8	128.3	134.1	127.4	96.2
December	125.1	128.3	134.2	127.4	96.2
1981 January	125.1	129.1	136.0	127.4	96.2
February	125.3	129.0	136.0	127.4	95.2
March	125.9	129.0	136.0	127.4	95.2
April	126.0	129.0	136.0	127.4	95.2
May	129.1	128.7	135.1	127.4	95.2
June	129.1	128.7	135.1	127.4	95.2

Appendix 1: BLS Price Indices Table A1-2

	Local Coin		Intrastate	Interstate	International
	Service	Service	MTS	MTS	MTS
July	129.1	139.2	135.1	147.7	83.5
August	129.3	139.2	139.5	147.7	83.5
September	129.5	141.0	140.4	147.7	83.5
October	130.0	141.3	140.4	147.7	83.5
November	130.0	141.3	142.4	147.7	83.5
December	130.0	142.1	144.9	147.7	83.5
1982 January	130.0	143.1	144.9	147.7	83.5
February	130.0	143.1	144.9	147.7	83.5
March	130.0	143.1	144.9	147.7	83.5
April	132.8	146.4	145.2	153.4	83.5
May	143.2	146.4	145.3	153.4	83.5
June	143.6	146.7	145.5	153.4	91.4
July	143.6	146.7	145.5	153.4	91.4
August	143.1	146.8	145.5	153.4	92.3
September	144.0	146.8	145.6	153.4	92.3
October	144.0	147.1	146.4	153.4	92.3
November	144.0	147.1	146.4	153.4	92.3
December	144.0	147.5	147.4	153.4	92.3
1983 January	161.0	148.8	151.1	153.4	92.3
February	161.0	148.8	151.1	153.4	92.3
March	161.0	149.0	151.7	153.4	92.3
April	160.9	148.9	151.5	153.4	92.3
May	161.8	149.0	151.5	153.4	92.3
June	162.9	149.3	152.2	153.4	92.3
July	163.2	149.4	152.2	153.4	92.3
August	163.2	149.4	152.3	153.4	92.3
September	163.4	149.4	152.3	153.4	92.3
October	164.3	149.8	153.2	153.4	92.7
November	164.5	149.8	153.2	153.4	92.7
December	164.5	149.8	153.2	153.4	92.7
1984 January	184.2	150.7	155.9	153.4	92.7
February	184.2	150.6	155.9	153.4	92.5
March	184.4	150.7	155.9	153.4	92.5
April	184.6	150.8	156.1	153.4	92.5
May	184.6	150.5	155.3	153.4	92.5
June	189.0	146.2	155.9	145.6	87.3
July	222.3	146.6	157.0	145.6	86.8
August	227.2	147.1	158.3	145.6	86.8

Appendix 1: BLS Price Indices Table A1-2

	Discontinued Producer Price indexes				2 = 100)
	Local Coin Service	Toll Service	Intrastate MTS	Interstate MTS	International MTS
September	227.2	147.3	158.9	145.6	86.8
October	227.2	147.3	158.9	145.6	86.8
November	227.5	146.8	157.5	145.6	86.8
December	227.5	147.4	159.0	145.6	86.8
1985 January	228.2	147.6	159.8	145.6	86.8
February	228.9	147.7	159.8	145.6	86.8
March	228.9	147.7	159.8	145.6	86.8
April	228.9	148.1	161.0	146.6	86.8
May	230.5	149.9	162.6	147.9	86.8
June	230.7	146.3	162.8	141.3	86.5
July	230.7	146.3	162.8	141.3	86.5
August	230.8	146.6	163.4	141.3	86.5
September	231.2	146.5	163.2	141.3	86.5
October	231.3	146.5	163.2	141.3	86.5
November	233.8	146.7	163.7	141.3	86.5
December	233.8	146.2	162.4	141.3	86.5
1986 January	234.3	146.2	162.4	141.3	84.2
February	234.3	146.2	162.5	141.3	84.2
March	234.3	146.2	162.6	141.3	84.2
April	234.3	144.1	156.9	141.3	84.3
May	234.3	144.1	156.9	141.3	84.3
June	234.6	135.9	156.1	127.2	84.1
July	234.6	135.9	156.1	127.1	84.1
August	234.7	135.8	156.1	127.1	84.1
September	234.9	135.8	156.2	127.1	84.1
October	234.9	136.0	156.8	127.1	84.1
November	234.9	136.0	156.7	127.1	84.1
December	234.9	136.0	156.7	127.1	84.1
1987 January	235.0	128.8	156.1	115.3	84.0
February	234.9	128.5	155.4	115.3	84.0
March	234.9	128.5	155.4	115.3	84.0
April	234.9	128.4	155.2	115.3	84.0
May	234.9	128.1	154.4	115.3	84.0
June	234.9	128.0	154.2	115.3	84.0
July	234.9	125.4	152.4	112.1	84.0
August	234.6	125.4	152.4	112.1	84.0
September	234.5	124.9	151.3	112.1	84.0
October	234.5	124.9	151.3	112.1	84.0

Appendix 1: BLS Price Indices Table A1-2

	Local Coin	Toll	Intrastate	Interstate	International
	Service	Service	MTS	MTS	MTS
November	234.5	125.2	152.0	112.1	83.8
December	234.5	125.2	152.0	112.1	83.8
1988 January	234.3	124.6	152.4	110.1	83.8
February	233.1	124.3	151.7	109.1	83.8
March	233.1	124.3	151.7	109.1	83.8
April	233.1	124.2	151.7	109.1	83.8
May	233.1	124.2	151.4	109.1	83.8
June	233.1	124.2	151.7	109.1	83.8
July	233.1	122.4	146.8	109.1	83.8
August	233.1	122.7	147.9	109.1	83.8
September	233.4	124.5	147.8	112.8	83.8
October	246.0	123.8	146.0	112.8	83.8
November	246.0	123.9	146.2	112.8	83.8
December	246.2	122.3	146.3	109.7	83.8
1989 January	246.6	123.1	148.3	109.7	83.8
February	246.6	125.1	153.7	109.7	83.8
March	246.6	125.1	153.6	109.7	83.8
April	246.7	124.1	153.8	108.0	83.8
May	246.7	124.0	153.7	108.0	83.8
June	246.7	124.0	153.7	108.0	83.8
July	246.7	123.9	153.7	107.8	83.8
August	246.7	123.9	153.7	107.8	83.8
September	246.7	123.9	153.7	107.8	83.8
October	246.6	122.2	149.3	107.8	83.8
November	246.6	121.3	146.3	107.8	83.8
December	246.6	121.3	147.0	107.8	83.8
1990 January	246.6	122.0	148.8	107.9	83.4
February	246.7	122.4	149.8	107.9	83.4
March	246.7	121.1	146.3	107.9	83.4
April	246.6	121.1	146.3	107.9	83.4
May	246.6	121.1	146.3	107.9	83.4
June	246.6	121.1	146.3	107.9	83.4
July	246.6	120.9	146.2	107.9	83.4
August	246.6	120.8	146.2	107.7	83.4
September	246.6	120.9	146.2	107.7	83.4
October	246.7	120.7	145.8	107.7	83.4
November	248.5	120.0	143.8	107.7	83.4
December	248.5	120.0	143.8	107.7	83.4

Appendix 1: BLS Price Indices Table A1-2

	Discontinu	Ca i ioaa	acxco (107	2 = 100)	
	Local Coin Service	Toll Service	Intrastate MTS	Interstate MTS	International MTS
1991 January	248.8	117.8	140.9	105.6	83.4
February	248.8	117.8	140.9	105.6	83.4
March	248.8	117.7	140.7	105.4	83.4
April	248.8	117.6	140.6	105.4	83.4
May	248.8	117.6	138.8	105.4	83.4
June	248.8	116.6	138.1	105.4	83.4
July	248.8	116.3	138.1	104.7	83.4
August	248.8	117.0	138.1	104.7	83.4
September	248.8	117.8	140.0	106.3	83.6
October	248.8	117.8	140.2	106.3	83.6
November	249.2	117.8	140.1	106.3	83.6
December	249.4	117.8	140.1	106.3	83.6
1992 January	249.4	118.3	139.8	107.4	83.6
February	249.4	118.4	140.2	107.4	83.6
March	249.4	118.4	140.1	107.4	83.6
April	249.4	118.4	140.1	107.4	83.6
May	249.4	118.4	140.1	107.4	83.6
June	249.4	117.5	137.9	107.4	83.6
July	249.5	118.1	139.3	107.4	83.6
August	249.5	119.3	142.5	107.4	83.6
September	249.5	118.0	142.5	107.4	83.6
October	249.5	118.2	143.1	107.4	83.6
November	249.5	118.2	141.9	107.4	83.6
December	249.4	119.0	141.9	107.4	83.6
1993 January	249.4	118.0	140.2	106.6	78.8
February	249.4	118.0	142.2	106.6	78.8
March	249.4	117.9	140.1	109.4	78.1
April	249.4	119.1	140.1	109.4	78.6
May	249.4	118.8	140.3	109.4	68.6
June	249.4	118.9	140.5	109.4	68.6
July	250.1	118.7	140.0	109.4	68.6
August	250.1	119.7	139.7	111.5	68.6
September	250.1	120.1	140.7	111.5	68.6
October	250.1	120.0	140.4	111.5	68.6
November	250.1	120.0	140.4	111.5	68.6
December	250.1	119.9	140.4	111.5	68.6
1994 January	250.1	120.0	140.3	111.5	68.6
February	250.1	120.0	140.3	111.5	68.6

Appendix 1: BLS Price Indices
Table A1-2

	Local Coin Service	Toll Service	Intrastate MTS	Interstate MTS	International MTS
March	250.1	123.1	139.7	118.3	68.6
April	252.3	122.9	139.0	118.3	68.6
May	252.3	122.9	139.0	118.3	68.6
June	252.3	122.8	139.1	118.3	68.6
July	252.3	122.8	139.1	118.3	68.6
August	252.3	122.8	139.1	118.3	68.6
September	252.2	122.9	139.3	118.3	68.6
October	252.2	122.8	139.0	118.3	68.6
November	252.2	122.6	138.4	118.3	68.6
December	252.2	122.6	138.4	118.3	68.6
1995 January	254.4	121.4	135.4	118.3	68.6
February	254.4	124.8	135.8	124.7	68.6
March	252.4	124.8	135.8	124.7	68.6
April	252.4	124.8	135.8	124.7	68.6
May	252.2	124.8	135.8	124.7	68.6
June	252.2	124.8	135.8	124.7	68.6
July	252.5	127.3	142.4	124.7	68.6
August		,			
September			Discontinued		
October					

Appendix 1: BLS Price Indices Table A1-2

	WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
1972 January	99.8	100.0	99.1	98.5
February	99.8	100.0	99.3	100.1
March	99.8	100.0	99.3	100.1
April	99.8	100.0	99.3	100.1
May	99.8	100.0	99.3	100.1
June	99.8	100.0	99.3	100.1
July	99.8	100.0	99.3	100.1
August	100.3	100.0	101.3	100.1
September	100.3	100.0	101.3	100.1
October	100.3	100.0	101.3	100.1
November	100.3	100.0	101.3	100.1
December	100.0	100.0	100.1	100.1
1973 January	100.1	100.0	100.2	100.1
February	100.1	100.0	100.2	100.1
March	101.5	102.0	100.2	100.1
April	101.5	102.0	100.2	100.1
May	101.5	102.0	100.2	100.1
June	101.5	102.0	100.2	100.1
July	101.5	102.0	100.2	100.1
August	102.6	102.0	100.4	100.1
September	102.6	102.0	100.4	100.1
October	102.6	102.0	100.4	100.1
November	102.8	102.0	104.9	100.1
December	103.5	102.0	107.6	99.6
1974 January	103.7	102.0	108.1	99.6
February	103.7	102.0	108.1	99.6
March	103.7	102.0	108.1	99.6
April	103.7	102.0	108.1	99.5
May	103.7	102.0	108.1	99.5
June	103.7	102.0	108.1	99.5
July	102.5	100.3	108.1	99.5
August	102.5	100.3	108.1	99.5
September	102.7	100.3	109.1	99.5
October	102.6	100.3	108.8	99.5
November	102.6	100.3	108.8	99.5
December	102.6	100.3	108.8	99.5
1975 January	102.7	100.3	108.8	99.5
February	102.7	100.3	108.8	99.5

Appendix 1: BLS Price Indices Table A1-2

	WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
March	104.5	102.9	108.8	99.5
April	105.2	102.9	111.2	102.2
May	105.2	102.9	111.2	103.6
June	105.2	102.9	111.2	103.8
July	105.2	102.9	111.2	103.8
August	105.5	102.9	112.4	103.8
Septem	ber 106.4	102.9	115.7	103.8
October	106.4	102.9	115.7	107.0
Novemb	per 106.8	102.9	117.0	107.0
Decemb	oer 106.8	102.9	121.6	107.0
1976 January			121.6	107.0
Februar		1	121.6	107.0
March	109.6	1	121.6	108.7
April	109.6		121.6	109.0
May	109.6		121.6	109.0
June	109.6	105.1	121.6	108.3
July	109.6	1	121.6	108.3
August	110.8		126.0	108.3
Septem		1	126.0	108.3
October		1	126.0	108.3
Novemb		1	126.0	108.3
Decemb			126.0	108.3
1977 January		105.1	126.7	108.3
Februar			127.5	108.3
March	111.3		127.5	108.3
April	111.4	1	127.9	108.3
May	111.4	1	127.9	108.3
June	111.4	1	127.9	108.4
July	111.4	105.1	127.9	108.4
August	111.6	105.1	128.8	108.4
Septem		105.1	128.8	108.4
October		1	131.4	108.4
Novemb			131.4	108.7
Decemb			131.7	108.6
1978 January		105.1	131.7	108.6
Februar	•	105.1	131.5	108.6
March	113.0 112.7		133.8	108.6
April	112.7	105.1	132.7	108.6

Appendix 1: BLS Price Indices Table A1-2

		WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
N	Лау	112.7	105.1	132.7	108.6
	une	112.7	105.1	132.7	108.6
J	uly	113.2	105.1	134.4	108.6
A	ugust	113.2	105.1	134.7	108.6
S	September	113.2	105.1	134.7	108.6
	October	113.2	105.1	134.7	108.6
N	lovember	113.2	105.1	134.7	108.6
D	December	113.2	105.1	134.7	108.6
1979 J	anuary	113.2	105.1	134.7	108.6
	ebruary	113.2	105.1	134.7	108.6
M	/larch	113.2	105.1	134.7	108.6
A	\pril	113.6	105.1	136.0	108.7
M	/lay	113.6	105.1	136.0	108.7
J	une	113.6	105.1	136.0	108.7
J	uly	113.6	105.1	136.0	108.7
A	lugust	114.3	105.1	138.5	108.7
S	September	114.3	105.1	138.5	108.3
C	October	114.3	105.1	138.5	108.3
N	lovember	114.3	105.1	138.5	108.3
D	December	114.4	105.1	139.0	108.3
1980 J	anuary	114.4	105.1	139.0	108.3
F	ebruary	114.4	105.1	138.8	108.3
l M	/larch	114.4	105.1	138.8	108.3
A	pril	114.6	105.1	139.7	108.3
l M	/lay	114.6	105.1	139.7	108.3
	une	118.4	110.5	139.3	110.7
	uly	118.4	110.5	139.3	110.7
	lugust	118.4	110.5	139.3	110.7
	September	118.4	110.5	139.3	110.8
	October	118.8	110.5	140.7	110.8
	lovember	118.8	110.5	140.7	110.8
	December	118.8	110.5	140.7	110.8
	anuary	120.2	110.5	145.9	110.8
	ebruary	120.2	110.5	145.8	110.8
	/larch	120.2	110.5	145.8	110.8
	\pril	120.2	110.5	145.8	110.8
	<i>l</i> lay	120.5	110.5	146.9	117.2
J	une	120.5	110.5	146.9	117.2

Appendix 1: BLS Price Indices Table A1-2

			Interstate	Intrastate	,	
		WATS	WATS	WATS	Line	
	July	128.9	122.1	146.9	153.3	
	August	128.9	122.1	146.9	153.3	
	September	129.8	122.1	150.1	154.5	
	October	129.8	122.1	150.1	154.5	
	November	129.8	122.1	150.1	154.5	
	December	129.9	122.1	150.5	154.5	
1982	January	129.9	122.1	150.5	154.5	
	February	129.9	122.1	150.5	154.5	
	March	129.9	122.1	150.5	154.5	
	April	133.5	127.1	150.5	156.9	
	May	133.4	127.1	149.9	156.9	
	June	133.4	127.1	149.9	156.9	
	July	133.4	127.1	149.9	156.9	
	August	133.5	127.1	154.4	156.9	
	September	133.5	127.1	154.4	156.9	
	October	133.1	127.1	148.9	156.9	
	November	133.1	127.1	148.9	156.9	
	December	133.1	127.1	148.9	156.9	
1983	January	131.8	127.1	144.1	156.9	
	February	131.8	127.1	144.3	156.9	
	March	131.8	127.1	144.3	156.9	
	April	131.8	127.1	144.3	156.9	
	May	132.4	127.1	146.3	156.9	
	June	132.7	127.1	147.6	156.9	
	July	133.7	127.1	151.2	156.9	
	August	133.7	127.1	151.2	156.9	
	September	133.7	127.1	151.2	156.9	
	October	133.7	127.1	151.2	156.9	
	November	133.7	127.1	151.2	156.9	
	December	133.7	127.1	151.1	158.4	
1984	January	132.2	127.1	145.6	158.4	
	February	132.2	127.1	145.9	158.4	
	March	132.7	127.1	147.3	158.4	
	April	132.6	127.1	147.1	158.4	
	May	132.8	127.1	147.8	158.4	
	June	127.2	119.6	147.4	158.4	
	July	127.6	119.6	148.8	158.4	
	August	127.5	119.6	148.5	158.4	

Appendix 1: BLS Price Indices Table A1-2

	Disconti	nuea Produ		dexes (1972 = 100
	WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
Septembe	r 127.5	119.6	148.5	158.4
October	127.6	119.6	148.7	158.4
November	127.6	119.6	148.7	163.1
December	127.8	119.6	149.6	163.1
1985 January	127.6	119.6	148.8	163.1
February	127.6	119.6	148.8	163.1
March	127.8	119.6	149.7	159.2
April	127.8	119.6	149.5	159.2
May	128.2	119.6	150.9	159.2
June	123.5	113.1	151.0	168.3
July	123.5	113.1	151.0	168.3
August	123.5	113.1	151.0	168.3
Septembe	r 123.7	113.1	151.6	168.3
October	123.6	113.1	151.3	168.3
November	123.5	113.1	150.9	168.3
December	123.3	113.1	150.3	168.3
1986 January	124.2	113.1	153.6	
February	124.2	113.1	153.6	
March	124.2	113.1	153.6	Discontinued
April	124.4	113.1	154.2	
May	124.9	113.9	154.1	
June	115.4	100.8	154.3	
July	115.3	100.6	154.3	
August	114.2	100.6	150.2	
Septembe	r 113.8	100.6	148.9	
October	113.8	100.6	148.7	
November	113.7	100.6	148.6	
December	113.3	100.6	146.9	
1987 January	111.1	97.5	146.9	
February	110.9	97.5	146.4	
March	110.9	97.5	146.4	
April	110.9	97.5	146.4	
May	110.9	97.5	146.4	
June	110.3	97.5	144.2	
July	110.3	97.5	144.1	
August	110.2	97.5	143.7	
Septembe		97.5	143.6	
October	110.1	97.5	143.4	

Appendix 1: BLS Price Indices
Table A1-2
Discontinued Producer Price Indexes (1972 = 100)

		WATS	Interstate WATS	Intrastate WATS
	November	110.1	97.5	143.4
	December	110.1	97.5	143.4
1988	January	106.4	93.1	141.4
	February	105.9	93.1	139.8
	March	105.9	93.1	139.8
	April	104.9	93.1	136.2
	May	104.9	93.1	136.2
	June	104.8	93.1	135.6
	July	105.0	93.1	135.6
	August	104.0	93.1	132.9
	September	103.3	93.1	130.1
	October	102.7	93.1	128.2
	November	103.4	93.1	130.5
	December	102.7	92.5	129.7
1989	January	102.0	90.6	131.7
	February	102.0	90.6	131.7
	March	102.0	90.6	131.7
	April	99.2	87.0	131.4
	May	99.1	87.0	131.0
	June	99.3	87.0	131.8
	July	99.1	87.0	131.0
	August	99.0	87.0	130.5
	September	98.8	87.0	130.1
	October	98.8	87.0	130.0
	November	98.8	87.0	130.0
	December	98.8	87.0	130.0
1990	,	98.4	87.0	128.6
	February	98.4	87.0	128.6
	March	98.5	87.0	128.7
	April	98.5	87.0	128.7
	May	98.5	87.0	128.7
	June	98.5	87.0	128.7
	July	97.2	87.0	124.2
	August	97.2	87.0	124.2
	September	97.8	87.0	126.1
	October	97.8	87.0	126.1
	November	97.8	87.0	126.1
	December	97.8	87.0	126.1

Appendix 1: BLS Price Indices
Table A1-2
Discontinued Producer Price Indexes (1972 = 100)

	WATS	Interstate WATS	Intrastate WATS
1991 January	97.5	87.0	125.3
February	97.5	87.0	125.3
March	97.5	87.0	125.3
April	97.5	87.0	125.3
May	97.5	87.0	125.3
June	97.5	87.0	125.3
July	97.5	87.0	125.3
August	97.5	87.0	125.3
September	97.5	87.0	125.3
October	97.5	87.0	125.3
November	97.5	87.0	125.3
December	97.4	87.0	124.8
1992 January	97.1	87.0	123.9
February	97.1	87.0	123.9
March	97.1	87.0	123.9
April	97.1	87.0	123.9
May	97.1	87.0	123.9
June	97.1	87.0	123.7
July	97.1	87.0	123.7
August	97.1	87.0	123.7
September	97.1	87.0	123.7
October	97.0	87.0	123.4
November	97.0	87.0	123.4
December	97.0	87.0	123.4
1993 January	97.0	87.0	123.3
February	97.0	87.0	123.3
March	97.0	87.0	123.3
April	96.5	87.0	121.5
May	96.5	87.0	121.5
June	96.5	87.0	121.5
July	96.5	87.0	121.5
August	96.5	87.0	121.5
September	96.5	87.0	121.5
October	96.5	87.0	121.5
November	96.5	87.0	121.5
December	96.2	87.0	120.3
1994 January	96.2	87.0	120.3
February	96.2	87.0	120.3

Appendix 1: BLS Price Indices
Table A1-2
Discontinued Producer Price Indexes (1972 = 100)

	WATS	Interstate WATS	Intrastate WATS
March	96.2	87.0	120.4
April	96.2	87.0	120.4
May	96.2	87.0	120.4
June	95.6	87.0	118.3
July	95.6	87.0	118.3
August	95.6	87.0	118.3
September	95.6	87.0	118.3
October	95.6	87.0	118.3
November	95.6	87.0	118.3
December	95.6	87.0	118.3
1995 January	95.1	87.0	116.5
February	95.1	87.0	116.5
March	95.1	87.0	116.5
April	95.1	87.0	116.5
May	95.1	87.0	116.5
June	95.1	87.0	116.5
July	95.1	87.0	116.5
August			
September		Discontinued	
October			

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

		Table A 1-3. Nevised Floudcei Flice ilidexes (Julie 1993 – 100)				
		Telephone Communications, except Radiotelephone	Local Service, except Private Lines	Residence Local Service	Business Local Service	Coin Local Service
BLS Seri	es ID	pcu4813#	pcu4813#1	pcu4813#111	pcu4813#112	pcu4813#113
1995	June	100.0	100.0	100.0	100.0	100.0
	July	102.8	100.0	100.0	100.0	100.0
	August	100.7	100.0	100.0	100.0	100.0
	September	100.6	100.1	100.0	100.2	100.6
	October	100.4	100.0	99.8	100.2	100.6
	November	99.6	100.0	99.8	100.2	100.6
	December	99.6	100.0	99.8	100.2	100.6
1996	January	99.3	100.0	99.8	100.1	100.6
	February	99.6	100.0	99.8	100.2	100.6
	March	99.5	100.1	99.8	100.2	101.9
	April	99.7	100.1	99.8	100.2	101.9
	May	99.5	100.1	99.8	100.2	101.9
	June	99.9	100.2	100.0	100.2	101.9
	July	100.3	100.3	100.0	100.4	102.0
	August	100.6	100.4	100.0	100.5	102.0
	September	100.5	100.4	100.0	100.5	102.0
(prelim)	October	100.0	100.4	100.1	100.5	102.0
(prelim)	November	99.4	100.4	100.1	100.5	102.0
(prelim)	December	99.6	100.4	100.1	100.5	102.0
(p) 1997	January	100.5	100.4	100.1	100.5	102.0

Producer Price Indices are subject to revision four months after release

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

	Other Local Service	e Directory Assistance	Other Local Service, except Directory Assistance	Public Switched Toll Service	Residence Switched Toll Service	Intrastate Residence Switched Toll Service
BLS Series ID	pcu4813#114	pcu4813#11401	pcu4813#11409	pcu4813#2	pcu4813#21	pcu4813#211
1995 June	100.0	100.0	100.0	100.0	100.0	100.0
July	100.0	100.0	100.0	105.2	102.6	101.2
August	100.0	100.0	100.0	101.3	101.3	101.1
Septem	ber 100.0	100.0	100.0	101.0	101.0	103.2
October	100.0	100.0	100.0	100.8	102.0	105.8
Novem	ber 100.0	100.0	100.0	99.3	99.7	102.9
Decemb	per 100.0	100.0	100.0	99.1	100.1	104.2
1996 January	100.0	100.0	100.0	98.8	99.6	101.6
Februar	y 100.0	100.0	100.0	99.3	100.3	104.7
March	100.0	100.0	100.0	99.0	101.3	106.3
April	100.0	100.0	100.0	99.3	100.6	104.2
May	100.0	100.0	100.0	98.8	100.8	106.0
June	100.0	100.0	100.0	99.5	101.2	106.0
July	100.0	100.0	100.0	100.2	102.8	106.4
August	100.0	100.0	100.0	100.9	103.3	110.4
Septem	ber 100.0	100.0	100.0	100.6	102.1	107.8
(prelim) Octobe	er 100.0	100.0	100.0	99.6	102.0	103.4
(prelim) Novem	ber 100.0	100.0	100.0	98.6	101.0	106.4
(prelim) Decem	ber 100.0	100.0	100.0	98.9	100.6	104.0
(p) 1997 Januar	y 100.0	100.0	100.0	100.6	102.9	100.0

Producer Price Indices are subject to revision four months after release

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

		Interstate Residence Switched Toll Service	International Residence Switched Toll Service	Business Switched Toll Service	Business Switched Access Toll Service	Outbound Business Switched Access Toll Service
BLS Series	s ID	pcu4813#212	pcu4813#213	pcu4813#22	pcu4813#221	pcu4813#2211
1995 Ji	une	100.0	100.0	100.0	100.0	100.0
Ji	uly	105.2	99.4	108.2	104.0	103.8
A	August	103.7	95.7	101.4	101.4	101.3
S	September	100.1	97.2	101.0	102.1	103.1
C	October	100.9	96.4	99.5	100.3	99.4
N	November	98.1	94.3	98.8	99.2	99.4
Г	December	96.3	97.1	98.0	98.4	99.2
1996 Ja	anuary	99.3	95.0	97.8	98.7	99.1
F	ebruary	98.2	95.0	98.0	99.0	98.3
N	March (98.8	92.9	96.3	96.5	96.2
A	April	98.6	93.3	97.8	98.4	98.0
N	Лау	97.9	93.8	96.5	96.7	97.8
Jı	une	98.2	94.2	97.5	97.2	97.5
Ju	uly	102.3	92.8	97.1	97.4	97.2
A	August	99.2	90.5	98.0	99.4	99.7
S	September	98.1	89.3	98.9	100.3	101.7
(prelim) C	October	103.1	92.6	96.7	96.1	95.7
(prelim) N	lovember	100.1	81.5	95.8	95.6	95.5
(prelim)	December	102.2	79.7	96.8	98.3	98.4
(p) 1997 J	anuary	111.7	81.2	97.9	99.0	99.7

Producer Price Indices are subject to revision four months after release

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

	Table AT-0. Nevide	<u>a i rodadon i rico ina</u>	CACS (Build 1999 -	100)
	Intrastate Business Switched Access Toll Service, Outbound	Interstate Business Switched Access Toll Service, Outbound	International Business Switched Access Toll Service, Outbound	Inbound Business Switched Access Toll Service
BLS Series ID	pcu4813#22111	pcu4813#22112	pcu4813#22113	pcu4813#2212
1995 June	100.0	100.0	100.0	100.0
July	100.6	102.7	116.4	104.4
August	100.7	102.7	99.2	101.6
September	101.0	103.3	109.4	100.3
October	100.8	98.9	97.0	101.9
November	100.8	98.5	97.9	98.9
December	100.3	98.5	98.9	97.1
1996 January	100.9	95.9	102.7	98.0
February	101.5	96.5	94.0	100.1
March	100.7	93.7	88.7	97.0
April	101.2	94.8	96.3	99.0
May	101.6	95.1	93.9	94.7
June	101.1	96.5	87.6	96.5
July	101.6	95.3	88.8	97.7
August	102.0	101.6	88.5	98.9
September	102.2	108.2	84.0	97.7
(prelim) October	100.9	94.7	81.7	96.8
(prelim) November	101.5	94.2	79.8	95.6
(prelim) December	102.2	98.5	86.6	98.0
(p) 1997 January	102.7	100.3	89.2	97.7

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

			<u>a i ioaacoi i iioo ii</u>		,	
		Intrastate Business Switched Access Toll Service, Inbound	Interstate Business Switched Access Toll Service, Inbound	International Business Switched Access Toll Service, Inbound	Business Special Access Switched Toll Service, except Private Lines	Outbound Business Special Access Switched Toll Service
BLS Serie	es ID	pcu4813#22121	pcu4813#22122	pcu4813#22123	pcu4813#222	pcu4813#2221
1995	June	100.0	100.0	100.0	100.0	100.0
	July	100.6	107.5	94.6	115.4	119.9
	August	100.7	101.8	103.9	101.3	100.3
	September	98.9	101.1	92.4	99.1	97.7
	October	98.3	104.1	99.3	98.0	98.3
	November	99.5	99.5	95.5	98.0	98.5
	December	101.0	93.5	107.1	97.3	97.8
1996	January	96.2	95.6	106.6	96.3	95.8
	February	97.4	98.8	101.2	96.4	95.1
	March	95.3	90.4	93.4	95.8	94.3
	April	95.9	94.9	91.0	96.9	95.3
	May	91.2	92.3	88.1	96.2	96.6
	June	96.6	90.0	93.9	98.2	96.2
	July	95.6	89.6	93.2	96.7	95.1
	August	91.4	94.8	100.6	95.6	95.9
	September	92.3	94.2	92.9	96.6	95.1
(prelim)	October	92.9	88.7	98.4	97.8	94.4
(prelim)	November	92.4	87.3	98.4	96.3	93.2
(prelim)	December	92.7	92.8	96.5	94.4	93.6
(p) 1997	January	89.8	93.1	100.8	96.1	93.7

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

	Intrastate Business Special Access Switched Toll Service, Outbound	Interstate Business Special Access Switched Toll Service, Outbound	International Business Special Access Switched Toll Service, Outbound	Inbound Business Special Access Switched Toll Service	Intrastate Business Special Access Switched Toll Service, Inbound
BLS Series ID	pcu4813#22211	pcu4813#22212	pcu4813#22213	pcu4813#2222	pcu4813#22221
1995 June	100.0	100.0	100.0	100.0	100.0
July	119.0	98.9	152.8	107.3	101.6
August	105.6	98.9	100.4	103.3	107.4
September	98.9	95.3	99.7	101.7	104.9
October	107.4	92.9	105.7	97.5	93.8
November	105.8	94.9	105.1	97.0	93.3
December	100.0	95.3	103.8	96.4	94.2
1996 January	105.2	92.6	97.8	97.1	93.5
February	103.6	91.7	96.6	98.9	96.7
March	101.2	89.4	98.7	98.5	92.5
April	102.1	92.4	97.1	99.9	108.5
May	93.8	92.2	100.6	95.5	98.3
June	102.2	86.6	103.2	101.6	102.2
July	112.2	82.9	101.7	99.4	101.2
August	110.6	89.6	101.2	95.0	101.7
September	100.7	91.6	98.7	99.3	100.1
(prelim) October	107.5	85.6	96.8	103.8	93.3
(prelim) November	109.7	85.6	96.8	101.8	93.3
(prelim) December	109.7	89.6	91.8	95.7	102.6
(p) 1997 January	88.5	92.6	95.3	100.5	102.4

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

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		Interstate Business Special Access Switched Toll Service, Inbound	International Business Special Access Switched Toll Service, Inbound	Other Toll Service	Private Line Service	Intrastate Private Line Service	LEC Intrastate Private Line Service
BLS Series ID		pcu4813#22222	pcu4813#22223	pcu4813#29	pcu4813#3	pcu4813#31	pcu4813#311
1995 June		100.0	100.0	100.0	100.0	100.0	100.0
July		109.0	99.6	100.0	100.0	100.0	100.0
Augu	ıst	102.2	98.5	100.0	100.0	100.0	100.0
Septe	ember	99.9	97.6	100.0	100.0	100.0	100.0
Octol	ber	99.7	97.3	100.0	100.0	100.0	100.0
Nove	ember	98.7	97.2	100.0	100.0	100.0	100.0
Dece	mber	97.1	97.1	100.0	100.0	100.0	100.0
1996 Janua	ary	97.7	97.0	100.0	100.0	100.0	100.0
Febru	uary	101.5	97.3	100.0	100.0	99.9	99.9
Marc	ch	100.8	97.4	100.0	100.0	99.9	99.9
April	1	98.8	97.6	100.0	100.3	101.1	101.2
May		96.0	97.5	100.1	100.4	101.1	101.2
June		105.4	97.7	99.8	100.4	101.1	101.2
July		101.1	97.5	100.3	100.4	101.1	101.2
Augu	ıst	91.1	97.2	100.9	100.4	101.1	101.2
Septe	ember	100.1	97.1	100.2	100.4	101.1	101.2
(prelim) Octo	ber	111.4	97.4	100.2	100.4	101.2	101.3
(prelim) Nove	ember	111.4	96.9	100.2	100.4	101.2	101.3
(prelim) Dece	ember	97.5	96.9	100.2	100.4	101.2	101.3
(p) 1997 Janu	ıary	106.4	96.5	100.2	100.4	101.2	101.3

Appendix 1: BLS Price Indices
Table A1-3: Revised Producer Price Indexes (June 1995 = 100)

	145107110.1	1011000 1 1000	CCI I TICC IIIGC
	Other Telephone Services	Directory Advertising	Other Telephone Services
BLS Series ID	pcu4813#9	pcu4813#91	pcu4813#99
1995 June	100.0	100.0	100.0
July	100.0	100.0	100.0
August	100.0	100.0	100.0
September	100.0	100.0	100.0
October	100.0	100.0	100.0
November	100.2	100.3	100.0
December	100.2	100.3	100.0
1996 January	100.2	100.3	100.0
February	100.2	100.3	100.0
March	100.2	100.3	100.0
April	100.2	100.3	100.0
May	100.2	100.3	100.0
June	100.2	100.3	100.0
July	100.2	100.2	100.0
August	100.2	100.3	100.0
September	100.2	100.2	100.0
(prelim) October	100.3	100.4	100.0
(prelim) November	100.3	100.4	100.0
(prelim) December	100.3	100.4	100.0
(p) 1997 January	100.5	100.7	100.0

Appendix 2: Residential Telephone Rates by City; October 1995

Αþ	pendix z. r	Residential Tel			City, Octo	Duei 198	10		
			Private line						
			with unlimited		Rotary service		Additional charges	i	
			rotary calling,		connection,		for Touch-Tone		
			SLCs,		surcharges, and		Service		Least cost inside
			surcharges,		taxes				wiring
			and taxes		Conorolly	Cubaidizad		Connection	maintenance plan
			Generally	Subsidized	Generally	Subsidized	Monthly Service	Connection	
AL	Huntsville	Bell South	available rate \$23.01	rate \$15.32	available rate \$42.68	<u>rate</u> \$21.34	,	Charge	\$1.50
AK	Anchorage	Anchorage	\$14.47	\$7.22	\$25.50	φ21.3 4			\$1.50 \$1.50
III .	•	U.S. West				¢17.00			
AZ	Tuscon		\$19.17	\$13.79	\$51.74	\$17.08			\$1.25
AR	West Memphis	Southwestern Bell	\$28.42	\$8.35	\$44.54	\$22.27			\$2.25
	Pine Bluff	Southwestern Bell	\$21.96	\$9.10	\$43.92	\$21.96			\$2.25
CA	Anaheim	Pac. Telesis	\$15.49	\$5.90	\$35.19	\$10.13			\$0.50
	Bakersfield	Pac. Telesis	\$15.49	\$5.90	\$35.19	\$10.13			\$0.50
	Fresno	Pac. Telesis	\$15.49	\$5.90	\$35.19	\$10.13			\$0.50
	Long Beach	GTE	\$23.53	\$11.76	\$45.73	\$22.87			\$0.95
	Los Angeles	Pac. Telesis	\$16.97	\$6.47	\$35.19	\$10.13			\$0.50
	Oakland	Pac. Telesis	\$16.60	\$6.33	\$35.19	\$10.13			\$0.50
	Salinas	Pac. Telesis	\$16.38	\$6.24	\$35.19	\$10.13			\$0.50
	San Bernadino	GTE	\$23.21	\$11.60	\$45.73	\$22.87			\$0.95
	San Diego	Pac. Telesis	\$15.49	\$5.90	\$35.19	\$10.13			\$0.50
	San Francisco	Pac. Telesis	\$15.49	\$5.90	\$35.19	\$10.13			\$0.50
	San Jose	Pac. Telesis	\$16.23	\$6.18	\$35.19	\$10.13			\$0.50
CO	Boulder	U.S. West	\$21.61	\$13.57	\$37.45	\$18.73			\$1.95
	Col. Springs	U.S. West	\$19.78	\$12.24	\$36.40	\$18.20			\$1.95
	Denver	U.S. West	\$21.21	\$13.18	\$37.56	\$18.78			\$1.95
CT	Ansonia	SNET	\$18.70	\$9.96	\$47.70	\$23.85			\$1.35
	Norwalk	SNET	\$17.60	\$8.87	\$47.70	\$23.85			\$1.35
DC	Washington	Bell Atlantic	\$19.50	\$8.81	\$30.76	\$15.38	\$0.70		\$1.25
FL	Miami	Bell South	\$16.96	\$8.94	\$40.00	\$20.00			\$2.50
	Tampa	GTE	\$17.61		\$62.98	\$31.49			\$1.00
	W. Palm Beach	Bell South	\$15.65	\$7.78	\$40.00	\$20.00			\$2.50
GA	Albany	Bell South	\$19.15	\$11.51	\$42.50		\$1.30		\$2.00
	Atlanta	Bell South	\$23.32	\$15.60	\$42.50		\$1.30		\$2.00
HI	Honolulu	GTE	\$19.58	\$11.95	\$45.50	\$22.75	\$1.65		\$1.50
IL	Chicago	Ameritech *	\$17.21	·	\$60.56	\$30.28	· ·		\$2.50
	Decatur	Ameritech	\$20.19		\$60.64	\$30.32			\$2.50
	Rock Island	Ameritech	\$20.76		\$60.64	\$30.32			\$2.50
IN	Indianapolis	Ameritech	\$19.77		\$47.00	\$23.50			\$2.00
	Terre Haute	GTE	\$22.13		\$60.06	\$30.03	\$0.80		\$1.50
IΑ	Fort Dodge	Contel	\$14.03		\$9.82	\$4.34	,,,,,,		\$1.25
KY	Louisville	Bell South	\$22.65		\$34.50	\$17.25	\$1.00		\$2.00
LA	Baton Rouge	Bell South	\$20.99		\$44.63	\$22.32	\$0.09		\$2.00
∥	New Orleans	Bell South	\$20.02		\$44.29	\$22.15	\$0.09		\$2.00
ME	Portland	NYNEX	\$17.99	\$10.35	\$47.44	\$10.60	******		\$0.75
MD	Baltimore	Bell Atlantic	\$24.88	ψ.0.00	\$48.00	\$24.00			\$0.85
	Boston	NYNEX	\$22.01	\$11.73	\$38.92	\$19.47	\$0.98		\$0.95
''' `	Hyannis	NYNEX	\$22.01	\$11.73	\$38.92	\$19.47	\$0.98		\$0.95
	Springfield	NYNEX	\$22.01	\$11.73	\$38.92	\$19.47	\$0.98		\$0.95
МІ	Detroit	Ameritech	\$16.71	\$12.13	\$44.52	\$22.26	\$2.43		\$2.25
	Grand Rapids	Ameritech	\$15.40	\$11.03	\$44.52	\$22.26	\$2.43		\$2.25
	Saginaw	Ameritech	\$16.19	\$11.82	\$44.52	\$22.26	\$2.43		\$2.25
MNI	Detroit Lakes	U.S. West	\$18.57	\$10.90	\$16.25	\$8.13	\$1.20	\$2.50	\$1.95
IVII V	Minneapolis	U.S. West	\$20.39	\$10.90	\$16.25	\$8.13	\$1.20 \$1.20	\$2.50 \$2.50	\$1.95 \$1.95
МІ	Pascagoula	Bell South	\$24.93	Ψ12.07	\$49.22	\$24.61	\$1.20 \$1.30	Ψ2.50	\$2.00
ll .	Kansas City	Southwestern Bell	\$18.12	\$9.64	\$49.22 \$42.47	\$24.01	φ1.30		\$3.00
IVIO	Mexico	Southwestern Bell							
			\$16.91	\$7.59	\$41.70	\$20.85			\$3.00
LAT	St. Louis	Southwestern Bell	\$18.18	\$9.67	\$43.06	\$21.53			\$3.00
	Butte	U.S. West	\$18.22	\$11.01	\$25.00	\$12.50			\$1.95
ll .	Grand Island	U.S. West	\$21.81		\$30.52	\$15.26	***		\$1.95
NJ	Phillipsburg	Bell Atlantic	\$11.96	640.44	\$44.52	\$22.26	\$0.99		\$1.25
NM	•	U.S. West	\$20.77	\$10.14	\$31.96	\$7.99			\$1.95
NY	Binghamton	NYNEX	\$26.22	\$14.51	\$62.71	\$11.40			\$0.52

Appendix 2: Residential Telephone Rates by City; October 1995

Λþ	poliula Z. I	Residentiai Tei	ehilolie i	ales by	City, Octo	ישטע ושטע	15		
			Private line						
			with unlimited		Rotary service		Additional charges	:	
			rotary calling,		connection,		for Touch-Tone		
			SLCs,		surcharges, and		Service		Least cost inside
			surcharges,		taxes		OCIVICO	•	wiring
			and taxes						maintenance plan
			Generally	Subsidized	Generally	Subsidized	Monthly Service	Connection	
NIX.	D. #-1-	NIVAIEV	available rate	rate	available rate	rate	,	Charge	00.50
NY	Buffalo	NYNEX	\$30.88	\$18.96	\$63.83	\$11.61			\$0.52
	Massena	NYNEX	\$23.60	\$11.97	\$62.34	\$11.33			\$0.52
	New York City	NYNEX *	\$25.28	\$15.53	\$64.29	\$11.69			\$0.52
	Ogdensburg	NYNEX	\$24.26	\$12.29	\$64.09	\$11.65			\$0.52
	Rochester	Rochester	\$16.81	\$13.03	\$33.32	\$10.00			\$1.99
NC	Raleigh	Bell South	\$17.21	\$9.79	\$44.03	\$22.02	\$0.50		\$2.50
	Rockingham	Bell South	\$15.67	\$8.24	\$44.03	\$22.02	\$0.50		\$2.50
ОН	Canton	Ameritech	\$19.18	\$10.94	\$36.50	\$0.00	\$0.80		\$2.00
	Cincinnati	Cin. Bell	\$20.28		\$25.70		\$0.82	•	\$1.50
	Cleveland	Ameritech	\$19.18	\$10.94	\$36.50	\$0.00	\$0.80		\$2.00
	Columbus	Ameritech	\$19.18	\$10.94	\$36.50	\$0.00	\$0.80		\$2.00
	Toledo	Ameritech	\$19.18	\$10.94	\$36.50	\$0.00	\$0.80		\$2.00
OR	Corvallis	U.S. West	\$18.84	\$11.42	\$12.00	\$6.00			
	Portland	U.S. West	\$22.12	\$14.05	\$12.00	\$6.00			
PA	Allentown	Bell Atlantic	\$16.62		\$40.00	\$20.00	\$0.94		\$1.25
	Ellwood City	Bell Atlantic	\$15.75		\$40.00	\$20.00	\$0.94		\$1.25
	Johnstown	GTE	\$20.05		\$55.86	\$27.93	\$1.50		\$1.50
	New Castle	Bell Atlantic	\$14.00		\$40.00	\$20.00	\$0.94		\$1.25
	Philadelphia	Bell Atlantic	\$18.87		\$40.00	\$20.00	\$0.94		\$1.25
	Pittsburgh	Bell Atlantic	\$17.71		\$40.00	\$20.00	\$0.94		\$1.25
	Scranton	Bell Atlantic	\$16.62		\$40.00	\$20.00	\$0.94		\$1.25
RI	Providence	NYNEX	\$23.47	\$15.34	\$36.20	\$18.10			\$0.95
SC	Beaufort	United	\$19.76		\$32.30	\$16.15			\$1.25
TN	Memphis	Bell South	\$18.66		\$47.39	\$23.69	\$1.50		\$1.25
	Nashville	Bell South	\$17.72		\$45.13	\$22.57	\$1.50		\$1.25
TX	Brownsville	Southwestern Bell	\$15.05	\$6.48	\$44.40	\$22.20	\$0.18	\$2.35	\$2.50
	Corpus Christi	Southwestern Bell	\$15.59	\$7.21	\$44.55	\$22.28	\$0.18	\$2.35	\$2.50
	Dallas	Southwestern Bell	\$17.66	\$9.09	\$45.59	\$22.80	\$0.18	\$2.35	\$2.50
	Fort Worth	Southwestern Bell	\$16.46	\$7.83	\$45.14	\$22.57	\$0.18		\$2.50
	Houston	Southwestern Bell	\$18.15	\$9.42	\$45.60	\$22.81	\$0.18		\$2.50
	San Antonio	Southwestern Bell	\$16.29	\$7.75	\$44.58	\$22.29	\$0.18		\$2.50
UT	Logan	U.S. West	\$15.96	\$7.85	\$19.90	\$9.95		+ =. 50	\$1.95
VA	Richmond	Bell Atlantic	\$23.96	\$3.88	\$38.50	\$19.25			\$0.85
	Smithfield	Continental	\$14.64	\$6.71	\$29.25	\$14.63	\$2.00		\$1.50
WA	Everett	GTE	\$18.91	\$11.14	\$42.08	\$15.65	Ψ2.00		\$1.50
	Seattle	U.S. West	\$16.45	\$11.39	\$32.98	\$16.49			\$1.95
wv	Huntington	Bell Atlantic	\$27.15	\$6.66	\$42.00	ψ10.40	\$1.50		\$0.85
Wi	Milwaukee	Ameritech *	\$15.90	\$15.90	\$34.87	\$0.00	ψ1.50		\$2.50
∥′′′	Racine	Ameritech *	\$15.86	\$15.86	\$34.70	\$0.00			\$2.50
	TAGITIC	/ WHOTICOH	ψ13.00	ψ15.00	ψυ+.//	ψ0.00			Ψ2.50

^{*} The measured service rate plus 100 five minute, same zone, business day calls is shown because unlimited local service is not offered.

Appendix 3: Business Telephone Rates by City; October 1995

AK Anchorage	, , , p	politaix o. D	ousilless rele	PIII	one ivat	es by City,					1
Touch-Tone Line, including SLCs, surcharges, and barkers of Touch-Tone Charges for Touch-Ton								Additional Single	Line Busines	ss rates	
AL											
Single Business Single Bus											
Less Connection for one touch-tome Charge Connection for one touch-tome Charge Ch						including SLCs,			Charges for		
Single Business						surcharges, and			Touch-Tone		
Business Key System Line Business Marith Charge Marith M						taxes					
Single Business Key System Line PBX Line Charge Single Business Key System Line PBX Line Charge								Connection for			Loget Coet
AL Huntsville Bell South September					Single			one touch-tone	Monthly	Connection	
Line					Business	Key System Line	PBX Line	line, including			
AL Huntsville					Line			taxes and	Charge	Charge	
AL Huntsville Bell South S66.01 \$73.60 \$73.60 \$73.62 \$1 \$1 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3								surcharges			Pian
AK Anchorage A	AL	Huntsville	Bell South		\$56.01	\$73.60	\$73.60				\$1.50
AZ Tuscon U.S. West AR West Memphis Southwestern Bell Pine Bluff Southwestern Bell South South South Southwestern Bell South S	AK						\$41.13				\$1.50
AR West Memphis Southwestern Bell Pine Buff Southwestern Bell S40.72 S51.01 S51.01 S92.94 S2.04 S2						· ·					\$2.00
Pine Bluff Southwestern Bell S40.72 S51.01 S51.01 S92.94 S2.04 S71.64 S51.01 S62.04 S71.64 S51.01 S62.07 S62.07 S71.64 S51.01 S62.07 S62.07 S71.64 S51.01 S62.07 S62.07 S62.07 S62.07 S62.07 S71.64 S51.01 S62.07 S62.0					, ,						\$2.75
CA Anahelm	,	•									\$2.75
Bakersfield Pac. Telesis ** \$30.98 \$32.67 \$32.67 \$71.64 \$15	C A			**							\$1.00
Fresno	CA										
Long Beach GTE											\$1.00
Los Angeles Pac. Telesis S43.35 \$35.10											\$1.00
Color Angeles Fact. Helsis S32.53 S34.33 S34.33 S71.64 S31.65 S34.65		•									\$1.95
Salinas Pac. Telesis S32.87 S34.65 S71.64 S31.83 S31.83 S34.65 S71.64 S31.83 S31.83 S34.65 S71.64 S31.83 S31		Los Angeles									\$1.00
San Bemadino GTE			Pac. Telesis		\$32.53	\$34.33	\$34.33	\$71.64			\$1.00
San Diego Pac. Telesis ** \$30.35 \$32.04 \$31.04 \$31.04 \$31.04 \$31.04 \$31.04 \$31.05 \$30.75 \$30.75 \$30.75 \$30.35 \$32.04 \$31.64 \$31.80 \$31.80 \$32.53 \$34.33 \$34.33 \$31.64 \$31.80 \$31.80 \$33.57 \$33.57 \$33.57 \$31.64 \$31.80 \$31.80 \$33.57 \$33.57 \$31.64 \$31.80 \$33.57 \$33.57 \$31.64 \$31.80 \$31.80 \$33.57 \$33.57 \$31.64 \$31.80 \$31.80 \$33.57 \$33.57 \$37.164 \$31.80 \$31.80 \$33.57 \$33.57 \$37.164 \$31.80 \$31.80 \$33.57 \$31.80 \$37.80 \$37.80 \$37.80 \$37.80 \$37.80 \$37.80 \$37.80 \$38.90 \$32.06 \$32		Salinas	Pac. Telesis	**	\$32.87	\$34.65	\$34.65	\$71.64			\$1.00
San Diego Pac. Telesis ** \$30.35 \$32.04 \$32.04 \$71.64 \$31.60 \$31.60 \$31.60 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$33.57 \$33.57 \$71.64 \$31.80 \$32.5		San Bernadino	GTE	**	\$43.34	\$46.13	\$51.54	\$84.33			\$1.95
San Francisco Pac. Telesis ** \$32,53 \$34,33 \$34,33 \$71,64 \$15		San Diego	Pac. Telesis	**		\$32.04	\$32.04				\$1.00
San Jose Pac. Telesis *** \$31.80 \$33.57 \$33.57 \$71.64 \$32.00				**							\$1.00
CO Boulder U.S. West S47.26 S54.79 S58.73 S74.91 S2 Col. Springs U.S. West S43.82 S50.88 S54.56 S72.80 S2 S55.91 S72.80 S2 S55.91 S54.31 S58.23 S75.11 S2 S55.91 S54.31 S58.23 S75.11 S2 S55.91 S54.31 S58.23 S75.11 S2 S55.91				**							\$1.00
Col. Springs U.S. West S43.82 \$50.88 \$54.56 \$72.80 \$2.50	0										\$2.75
Denver											
CT											\$2.75
Norwalk SNET \$40.86 \$46.69 \$46.69 \$68.90 \$2.06 \$2.06 \$3.361 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$2.06 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$3.361 \$3.399 \$34.21 \$66.03 \$2.06 \$3.361 \$3.399 \$34.21 \$3.360 \$3											\$2.75
DC Washington Bell Atlantic *** \$33.61 \$33.99 \$34.21 \$66.03 \$2.06 \$35	CI										\$2.65
FL Miami Bell South \$40.74 \$56.60 \$81.59 \$60.20 \$2 Tampa GTE \$37.83 \$44.71 \$65.38 \$78.89 \$31.83 \$48.71 \$65.38 \$78.89 \$31.83 \$48.71 \$65.38 \$78.89 \$31.83 \$48.71 \$65.38 \$78.89 \$31.83 \$48.71 \$65.38 \$75.16 \$59.92 \$32.30 \$32.41 \$32.41 \$39.67 \$60.12 \$63.03 \$52.25 \$2.30 \$32.41 \$32.41 \$32.04 \$32.75 \$32.75 \$32.75 \$32.76 \$31.40 \$32.04 \$32.75 \$32.75 \$32.75 \$32.76 \$31.40 \$32.04 \$32.75 \$32.75 \$32.76 \$31.80 \$32.41 \$33.98 \$36.69 \$36.69 \$36.77.20 \$32.80 \$32.70 \$32.80 \$32.80 \$32.70 \$32.80 \$32.80 \$32.70 \$32.80											\$2.65
Tampa GTE	DC	Washington		**	\$33.61	\$33.99	\$34.21	\$66.03	\$2.06		\$3.00
W. Palm Beach Bell South \$37.43 \$52.18 \$75.16 \$59.92 \$2.30 \$2.30 Albany Bell South \$39.67 \$60.12 \$63.03 \$52.25 \$2.30 \$2.30 \$2.30 \$2.30 \$3.41 \$4.41 \$4.40 \$56.43 \$69.15 \$47.50 \$2.16 \$1.46 \$1.40	FL	Miami	Bell South		\$40.74	\$56.60	\$81.59	\$60.20			\$2.50
W. Palm Beach Bell South \$37.43 \$52.18 \$75.16 \$59.92 \$2.30 \$2.41 \$39.67 \$60.12 \$63.03 \$52.25 \$2.30 \$2.41		Tampa	GTE		\$37.83	\$48.71	\$65.38	\$78.89			\$1.00
GA Albany		W. Palm Beach	Bell South		\$37.43	\$52.18	\$75.16	\$59.92			\$2.50
Atlanta Bell South \$58.76 \$89.42 \$93.28 \$52.25 \$2.32 \$2 HI Honolulu GTE \$44.40 \$56.43 \$69.15 \$47.50 \$2.16 \$1 IL Chicago Ameritech ** \$32.04 \$32.75 \$32.75 \$57.64 \$1 Decatur Ameritech ** \$35.98 \$36.69 \$36.69 \$57.72 \$2 Rock Island Ameritech ** \$36.55 \$37.26 \$37.26 \$57.72 \$2 IN Indianapolis Ameritech \$55.92 \$62.49 \$59.00 \$1 Terre Haute GTE \$44.16 \$65.88 \$66.88 \$68.78 \$1.60 KY Louisville Bell South \$61.12 \$93.47 \$93.47 \$47.50 \$3.09 LA Baton Rouge Bell South \$47.68 \$73.56 \$73.83 \$73.83 \$87.55 \$0.18 ME Portland NYNEX \$38.63 \$43.26 \$62.35	GA		Bell South						\$2.30		\$2.00
HI											\$2.00
Chicago	ы										\$1.75
Decatur	II			**					Ψ2.10		\$1.50
Rock Island	'-	•									
Note that Standard											\$2.50
Terre Haute GTE \$44.16 \$65.88 \$65.88 \$68.78 \$1.60 \$1 IA Fort Dodge Contel \$22.42 \$29.34 \$37.29 \$15.65 KY Louisville Bell South \$61.12 \$93.47 \$93.47 \$47.50 \$3.09 \$2 LA Baton Rouge Bell South \$47.68 \$73.56 \$73.56 \$88.23 \$0.18 \$2 New Orleans Bell South \$48.17 \$73.83 \$73.83 \$87.55 \$0.18 \$2 ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 \$31 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 \$146 \$11 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$11 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$11 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$11 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00	II			••				* -			\$2.50
IA Fort Dodge	IN										\$1.50
KY Louisville Bell South \$61.12 \$93.47 \$93.47 \$47.50 \$3.09 \$2 LA Baton Rouge Bell South \$47.68 \$73.56 \$73.56 \$88.23 \$0.18 \$2 New Orleans Bell South \$48.17 \$73.83 \$73.83 \$87.55 \$0.18 \$2 ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 \$1 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 \$1 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2									\$1.60		\$1.50
LA Baton Rouge Bell South \$47.68 \$73.56 \$73.56 \$88.23 \$0.18 \$2 New Orleans Bell South \$48.17 \$73.83 \$73.83 \$87.55 \$0.18 \$2 ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 \$1 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 \$1 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63	IΑ	Fort Dodge	Contel		\$22.42	\$29.34	\$37.29	\$15.65			\$0.85
New Orleans Bell South \$48.17 \$73.83 \$73.83 \$87.55 \$0.18 \$2 ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 \$1 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 \$1 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 <td>KY</td> <td>Louisville</td> <td>Bell South</td> <td></td> <td>\$61.12</td> <td>\$93.47</td> <td>\$93.47</td> <td>\$47.50</td> <td>\$3.09</td> <td></td> <td>\$2.00</td>	KY	Louisville	Bell South		\$61.12	\$93.47	\$93.47	\$47.50	\$3.09		\$2.00
New Orleans Bell South \$48.17 \$73.83 \$73.83 \$87.55 \$0.18 \$2 ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 \$1 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 \$1 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 <td>LA</td> <td>Baton Rouge</td> <td>Bell South</td> <td></td> <td>\$47.68</td> <td>\$73.56</td> <td>\$73.56</td> <td>\$88.23</td> <td>\$0.18</td> <td></td> <td>\$2.00</td>	LA	Baton Rouge	Bell South		\$47.68	\$73.56	\$73.56	\$88.23	\$0.18		\$2.00
ME Portland NYNEX \$38.63 \$43.26 \$62.35 \$59.36 MD Baltimore Bell Atlantic ** \$43.50 \$46.12 \$46.12 \$98.50 MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2											\$2.00
MD Baltimore Bell Atlantic *** \$43.50 \$46.12 \$46.12 \$98.50 MA Boston NYNEX *** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44	ME	Portland							, , ,		\$1.95
MA Boston NYNEX ** \$42.81 \$45.21 \$47.99 \$97.67 \$1.46 \$1 Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55<	II			**							\$1.00
Hyannis NYNEX \$46.91 \$49.31 \$72.87 \$97.67 \$1.46 \$1 Springfield NYNEX ** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$3 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 <td>II</td> <td></td> <td></td> <td>**</td> <td></td> <td></td> <td></td> <td></td> <td>¢1 /6</td> <td></td> <td>\$1.95</td>	II			**					¢1 /6		\$1.95
Springfield NYNEX *** \$38.92 \$41.31 \$44.09 \$97.67 \$1.46 \$1 MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$3 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3	11117										\$1.95
MI Detroit Ameritech ** \$37.30 \$39.34 \$40.66 \$44.52 \$2.50 \$2 Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3				**							
Grand Rapids Ameritech ** \$35.57 \$37.52 \$38.79 \$44.52 \$2.50 \$2 Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3											\$1.95
Saginaw Ameritech ** \$37.47 \$39.42 \$40.69 \$44.52 \$2.50 \$1 MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3	MI										\$2.25
MN Detroit Lakes U.S. West \$42.40 \$49.32 \$51.63 \$49.50 \$2.20 \$4.50 \$2.20 \$2.20 \$4.50 \$2.20											\$2.25
Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2.20 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3.00 \$3.00		•	Ameritech	**	\$37.47	\$39.42					\$1.95
Minneapolis U.S. West \$54.96 \$61.91 \$64.91 \$49.50 \$2.20 \$4.50 MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2.20 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3.00 \$3.00	MN	Detroit Lakes	U.S. West		\$42.40	\$49.32	\$51.63	\$49.50	\$2.20	\$4.50	\$2.00
MI Pascagoula Bell South \$56.21 \$82.55 \$82.55 \$71.69 \$3.00 \$2 MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3			U.S. West				\$64.91			\$4.50	
MO Kansas City Southwestern Bell \$45.48 \$60.66 \$60.66 \$61.44 \$3	MI										\$2.00
	II										\$3.25
Mexico Southwestern Bell \$35.55 \$47.93 \$47.93 \$59.70 \$3											\$3.25

Appendix 3: Business Telephone Rates by City; October 1995

Business Line Business Key System Line PBX Line Charge Charges Monthly lakes and surcharges Monthly lakes		no rotoo	Line Dueines			oo o , o, ,		. 1			- 1
MO St. Louis Southwestern Bell St.		ssiales	Line busines	Additional Single		Donrocontativo					
No		l	A -1 -1:4:1								
No. St. Louis Southwestern Bell Susiness Line Susy System Line PBX Line Lin		l									
Taxes		l									
Single Business Key System Line PBX Line Connection for Charge Monthly Charge Connection for Charge Monthly Cha		l	Touch-Tone								
MO		l				taxes					
MO St. Louis Southwestern Bell Substrate Sub	Least Cost	l									
MO St. Louis Southwestern Bell S45.15 \$60.22 \$60.22 \$61.63 S61.63	Inside Wiring	Connection	Monthly				Single				
MO St. Louis Southwestern Bell \$45.15 \$60.22 \$60.22 \$61.63 S61.40 S6	Maintenance			line, including	PBX Line	Key System Line	Business				
MO St. Louis Southwestern Bell S45.15 \$60.22 \$61.63 S41.63 S41.64 S61.63 S41.64 S61.64	Plan	Charge	Charge	taxes and			Line				
MT Butte				surcharges							
NE Grand Island U.S. West S47,80 S59,81 \$68,17 \$79,50 \$1,99 \$1,99 \$1,99 \$1,00	\$3.25			\$61.63	\$60.22	\$60.22	\$45.15		Southwestern Bell	St. Louis	MO
NJ Phillipsburg	\$2.75	l		\$61.40	\$54.63	\$54.63	\$43.82		U.S. West		MT
NJ Phillipsburg	\$2.00	l		\$49.05	\$68.17	\$59.81	\$47.80		U.S. West	Grand Island	NE
NM Alamogord U.S. West \$56.15 \$68.13 \$88.13 \$57.47 NY Binghamton NYNEX ** \$49.99 \$52.92 \$53.21 \$120.92 \$1.37 Buffalo NYNEX ** \$50.87 \$53.86 \$54.16 \$123.08 \$1.40 Massena NYNEX ** \$49.70 \$52.61 \$52.90 \$120.20 \$1.38 New York City NYNEX ** \$51.23 \$54.24 \$54.54 \$123.95 \$1.40 New York City NYNEX ** \$51.23 \$54.24 \$54.54 \$123.95 \$1.40 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$51.08 \$54.08 \$54.37 \$123.55 \$1.38 New York City NYNEX ** \$44.44 \$54.39 \$54.59 \$62.75 \$64.38 \$1.50 New York City NYNEX ** \$44.25 \$50.29 \$54.26 \$62.85 New York City New York Side Ne	\$0.95	l	\$1.99	\$79.50			\$27.60	**	Bell Atlantic	Phillipsburg	NJ
NY Binghamton NYNEX \$49.99 \$52.92 \$53.21 \$120.92 \$1.37 Buffalo NYNEX \$50.87 \$53.86 \$54.16 \$123.08 \$1.40 Massena NYNEX \$49.70 \$52.61 \$52.90 \$120.20 \$1.38 New York City NYNEX \$49.70 \$52.61 \$52.90 \$120.20 \$1.38 New York City NYNEX \$551.23 \$54.24 \$54.54 \$123.95 \$1.40 Ogdensburg NYNEX \$551.08 \$55.08 \$54.08 \$54.37 \$123.58 \$1.38 Rochester Rochester \$48.84 \$45.39 \$55.56 \$3.87 Rochester Rochester \$48.84 \$454.39 \$55.56 \$3.87 Rochester \$48.84 \$454.39 \$55.56 \$3.87 Rochingham Bell South \$36.09 \$54.59 \$62.75 \$64.38 \$1.50 Rochingham Bell South \$36.09 \$54.59 \$62.75 \$64.38 \$1.50 Rochingham Bell South \$52.99 \$70.26 \$70.26 \$55.78 \$1.69 \$6.00 Rochingham S44.25 \$50.29 \$54.26 \$62.85 Rochingham S44.25 \$49.26 \$53.23 \$62.85 Rochingham S44.25 \$49.26 \$53.23 \$62.85 Rochingham S44.25 \$60.29 \$54.26 \$62.85 Rochingham S44.25 \$60.29 \$60.00 \$60.00 Rochingham S44.25 \$60.29 \$60.20 \$60.0	\$2.75	l	,								III .
Buffalo	\$5.71	l	\$1.37					**			II
Massena NYNEX \$49.70 \$52.61 \$52.90 \$120.20 \$1.38 New York City NYNEX \$51.23 \$54.24 \$54.54 \$123.95 \$1.40 Nynex \$51.08 \$54.08 \$54.37 \$123.58 \$1.38 New York City NYNEX \$51.08 \$54.08 \$54.37 \$123.58 \$1.38 New Cohester Rochester \$48.44 \$54.39 \$54.39 \$55.56 \$3.87 NC Raleigh Bell South \$36.09 \$54.59 \$62.75 \$64.38 \$1.50 New Cohester \$44.25 \$50.29 \$54.26 \$62.85 New Cohester \$44.25 \$60.20 \$60.00 New Solution \$60.00 New S	\$5.71	l		·				**			
New York City NYNEX ** \$51.23 \$54.24 \$54.54 \$123.95 \$1.40	\$5.71 \$5.71	l						**			
New Holl City NYNEX \$1.08 \$54.08 \$54.37 \$123.58 \$1.38 Rochester Rochester \$48.44 \$54.39 \$54.39 \$55.56 \$3.87 Rockingham Bell South \$36.09 \$54.59 \$62.75 \$64.38 \$1.50											
Rochester Rochester ** \$48.44	\$5.71									•	
No.	\$5.71										
Rockingham Bell South \$36.09 \$54.59 \$62.75 \$64.38 \$1.50	\$2.50	l						**			
OH Canton	\$2.50	l									NC
Cincinnati	\$2.50	l	\$1.50	\$64.38	\$62.75	\$54.59	\$36.09		Bell South	Rockingham	
Cleveland	\$2.00	l		\$62.85	\$54.26	\$50.29	\$44.25	**	Ameritech	Canton	ОН
Cleveland	\$2.50	\$6.00	\$1.69	\$55.78	\$70.26	\$70.26	\$52.99		Cin. Bell	Cincinnati	
Columbus	\$2.00	·						**	Ameritech	Cleveland	
Toledo	\$2.00	l						**	Ameritech	Columbus	
OR Corvallis U.S. West \$37.10 \$45.33 \$45.33 \$31.00 PA Allentown Bell Atlantic ** \$37.28 \$37.03 \$38.77 \$79.50 \$1.80 Ellwood City Bell Atlantic ** \$36.54 \$38.47 \$40.22 \$79.50 \$1.90 Johnstown GTE ** \$37.28 \$40.37 \$41.99 \$60.44 \$2.48 New Castle Bell Atlantic ** \$38.84 \$38.47 \$40.22 \$79.50 \$1.90 Philadelphia Bell Atlantic ** \$30.64 \$30.28 \$32.02 \$79.50 \$1.90 Pittsburgh Bell Atlantic ** \$31.67 \$31.31 \$33.05 \$79.50 \$1.90 Scranton Bell Atlantic ** \$36.00 \$35.74 \$37.49 \$79.50 \$1.80 RI Providence NYNEX ** \$43.59 \$45.17 \$46.50 SC Beaufort United \$38.04 \$56.04 \$66.6	\$2.00	l						**			
Portland	\$2.00	l									OR
PA Allentown Bell Atlantic ** \$37.28 \$37.03 \$38.77 \$79.50 \$1.80	\$2.00	l									
Ellwood City Bell Atlantic ** \$36.54 \$38.47 \$40.22 \$79.50 \$1.90 \$1	\$0.95	l	£1 00	·				**			Ь
Solition		l									F A
New Castle Bell Atlantic *** \$38.84 \$38.47 \$40.22 \$79.50 \$1.90	\$1.50	l								•	
New Caste Bell Atlantic \$30.64 \$30.28 \$32.02 \$79.50 \$1.90	\$1.50	l									
Pittsburgh Bell Atlantic \$30.04 \$30.20 \$379.50 \$1.90	\$1.50	l									
Scranton	\$1.50	l									
Strainton Solution	\$1.50	l									
SC Beaufort United \$38.04 \$58.04 \$66.61 \$35.60 TN Memphis Bell South \$54.84 \$92.81 \$92.81 \$66.80 \$3.15 Nashville Bell South \$52.30 \$88.46 \$88.46 \$63.62 \$3.00 TX Brownsville Southwestern Bell \$31.13 \$38.65 \$47.76 \$69.06 \$1.30 \$2.35 Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$1.50	l	\$1.80		\$37.49		\$36.00				
TN Memphis Bell South \$54.84 \$92.81 \$92.81 \$66.80 \$3.15 Nashville Bell South \$52.30 \$88.46 \$88.46 \$63.62 \$3.00 TX Brownsville Southwestern Bell \$31.13 \$38.65 \$47.76 \$69.06 \$1.30 \$2.35 Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$1.95	l		\$46.50	\$45.17	\$45.17	\$43.59	**	NYNEX	Providence	
Nashville Bell South \$52.30 \$88.46 \$88.46 \$63.62 \$3.00 TX Brownsville Southwestern Bell \$31.13 \$38.65 \$47.76 \$69.06 \$1.30 \$2.35 Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$1.25	l		\$35.60	\$66.61	\$58.04	\$38.04		United	Beaufort	SC
Nashville Bell South \$52.30 \$88.46 \$88.46 \$63.62 \$3.00 TX Brownsville Southwestern Bell \$31.13 \$38.65 \$47.76 \$69.06 \$1.30 \$2.35 Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$1.25	l	\$3.15	\$66.80	\$92.81	\$92.81	\$54.84		Bell South	Memphis	TN
TX Brownsville Southwestern Bell \$31.13 \$38.65 \$47.76 \$69.06 \$1.30 \$2.35 Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$1.25								Bell South	Nashville	
Corpus Christi Southwestern Bell \$31.74 \$39.15 \$48.36 \$69.29 \$1.30 \$2.35 Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$2.75	\$2.35									TX
Dallas Southwestern Bell \$38.35 \$47.17 \$60.02 \$70.91 \$1.30 \$2.35 Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$2.75										'
Fort Worth Southwestern Bell \$34.39 \$42.53 \$53.00 \$70.21 \$1.30 \$2.35 Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$2.75					*				•	
Houston Southwestern Bell \$41.22 \$50.76 \$65.41 \$70.93 \$1.30 \$2.35 San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$2.75										
San Antonio Southwestern Bell \$34.03 \$42.08 \$52.45 \$69.34 \$1.30 \$2.35	\$2.75 \$2.75										
	\$2.75	\$∠.35									
UT Logan U.S. West \$32.13 \$40.65 \$58.35 \$53.06	\$2.75										II
VA Richmond Bell Atlantic \$75.13 \$79.70 \$119.35 \$64.00 \$1.91	\$3.00										∥vA
Smithfield Continental \$29.97 \$45.87 \$60.76 \$29.25 \$2.00	\$1.75										
WA Everett GTE \$39.92 \$59.48 \$59.48 \$57.19	\$1.75										WA
Seattle U.S. West \$37.23 \$55.38 \$55.38 \$55.25	\$2.00								U.S. West		
WV Huntington Bell Atlantic \$73.37 \$77.67 \$114.59 \$96.90 \$2.75	\$3.00	l	\$2.75	\$96.90	\$114.59	\$77.67	\$73.37		Bell Atlantic		WV
WI Milwaukee Ameritech ** \$37.50 \$39.05 \$39.05 \$68.21	\$1.75			\$68.21	\$39.05	\$39.05	\$37.50		Ameritech	Milwaukee	WI
Racine Ameritech ** \$39.14 \$40.68 \$40.68 \$67.88	\$1.50							**	Ameritech	Racine	

^{**} The measured service rate plus 200 five minute, same zone, business day calls is shown because unlimited local service is not offered.

APPENDIX 4

A limited survey was conducted to collect residential rate data for 1983 through 1985 and single-line business rate data for 1983 through 1988. Monthly service and connection charges were collected, but no attempt was made to collect historic city-by-city data on taxes or on surcharges and credits accounted as revenue. The Annual Report on Utility and Carrier Regulation published by the National Association of Regulatory Utility Commissioners has some tax rates by year for 1983 through 1987. Tax rates appear to have changed only slightly over this period, so the table has been completed using reasonable assumptions. The tax and surcharge assumptions have relatively little impact on average rate levels. Historical residential and single line business rate data by city are contained in Appendix 4. Unlike rates shown in Appendix 2, these rates exclude taxes.

Historical data are not available for multi-line business, drop line and connection block installation, or inside wiring maintenance charges. Residential rates were collected for rotary service; business rates were collected for touch-tone service.

		Appe	HUIX	4	Local Rat	es: 198	3 - 1995							
			a		Private (Solude Subsolude measured	riber Line	Charges.	Rates ar	e for unlin	nited callin	ng where o			
		Excludi	ng Surcha	arges			Including	Surcharg	es Accou	nted as C	ompany F	Revenue		
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AL AK	Huntsville Anchorage	\$14.40 6.75	\$15.90 6.75	\$18.75 7.75	\$19.75 8.75	\$19.68 9.35	\$19.51 7.45	\$20.76 7.90	\$20.76 7.90	\$20.76 7.90	\$20.85 13.75	\$20.85 15.45	\$21.60 13.20	\$20.15 13.20
ΑZ	Tuscon	9.21	11.05	12.05	14.95	14.10	14.13	13.73	13.73	15.93	15.93	15.93	15.93	16.71
AR	West Memphis	13.30	15.80	17.88	18.81	19.41	19.41	20.31	22.52	22.52	22.52	22.52	23.52	23.52
	Pine Bluff	11.95	12.60	14.98	15.91	16.51	16.51	17.41	17.41	17.41	17.41	17.41	18.41	18.41
CA	Anaheim	6.70	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
	Bakersfield	6.70	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
	Fresno	6.70 7.75	8.25 9.75	9.25 10.75	10.50 13.13	10.99 12.70	10.63 11.96	11.30 13.27	10.56 14.11	11.80 15.78	11.70 15.91	11.63	11.58 15.23	14.37 20.63
	Long Beach Los Angeles	7.75	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	15.91 11.63	11.58	14.37
	Oakland	7.00	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
	Salinas	6.70	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
	San Bernadino	7.75	9.75	10.75	13.13	13.73	11.96	13.27	14.11	15.78	15.91	15.91	15.23	20.63
	San Diego	6.70	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
	San Francisco	7.00	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
00	San Jose	7.00	8.25	9.25	10.50	10.99	10.63	11.30	10.56	11.80	11.70	11.63	11.58	14.37
co	Boulder	7.55 6.51	8.09 6.97	9.59 8.80	11.56 10.24	14.14 13.15	14.19 13.07	15.38 14.20	15.62 15.00	18.40 18.18	18.65 18.32	18.79 18.15	18.96 18.29	19.05 18.37
	Col. Springs Denver	7.28	7.80	9.27	11.22	13.15	13.83	14.20	15.67	18.36	18.63	18.57	18.86	18.95
СТ	Ansonia	9.81	9.81	10.81	11.81	12.41	11.91	12.56	12.06	13.43	13.43	15.77	16.03	17.03
	Norwalk	10.94	10.94	11.94	12.94	13.54	13.04	13.69	13.14	14.69	14.69	14.77	15.03	16.03
DC	Washington	8.83	12.49	13.49	17.61	17.93	18.40	19.22	18.81	19.06	19.42	19.42	19.39	18.26
FL	Miami	12.20	12.20	13.20	13.78	14.36	13.39	14.66	14.53	14.77	14.81	14.83	14.83	14.83
	Tampa	11.74	11.74	12.63	14.13	14.23	14.23	15.13	15.13	15.13	15.13	15.13	15.13	15.31
O 4	W. Palm Beach	10.95	10.95	11.95	12.80	13.30	12.40	13.65	13.91	13.69	13.83	13.83	13.83	13.83
GA	Albany Atlanta	12.00 14.90	13.35 15.90	14.85 17.40	14.55 18.40	15.95 18.50	15.95 18.50	17.36 19.98	17.36 19.98	17.15 19.40	16.50 19.59	16.50 19.59	16.50 19.59	16.50 19.85
HI	Honolulu	10.90	11.40	12.40	16.10	16.70	16.70	16.40	17.00	17.00	17.00	17.07	17.33	18.01
IL	Chicago	7.41	11.91	9.50	10.53	12.23	12.33	13.21	14.19	14.24	14.19	14.38	14.37	14.31
	Decatur	7.80	10.85	11.85	12.85	13.48	13.48	14.36	16.06	17.11	18.02	18.25	18.24	17.78
	Rock Island	8.09	11.15	12.15	13.48	14.08	14.08	14.96	16.06	17.11	18.02	18.25	18.24	17.78
IN	Indianapolis	13.83	15.83	18.22	18.27	17.38	16.94	18.23	18.88	18.88	18.88	18.88	18.21	17.54
	Terre Haute	13.99	13.99	15.99	17.73	18.34	17.95	18.85	19.85	19.85	19.85	19.85	19.85	19.85
IA KY	Fort Dodge	7.40 16.53	7.40	8.40	11.45 20.70	11.70	9.20 19.15	10.10 20.05	10.80	12.50	12.50	12.50	12.50	12.50 20.65
LA	Louisville Baton Rouge	12.50	17.99 12.90	19.70 14.10	15.69	19.50 17.50	17.29	18.19	20.05 18.19	20.65 18.84	20.65 18.84	20.65 18.84	20.65 18.88	18.88
	New Orleans	13.40	13.80	14.80	16.42	18.23	18.02	18.92	18.92	19.68	19.68	19.68	18.19	18.19
ME	Portland	10.49	11.17	13.35	20.00	15.09	15.06	15.96	15.96	15.96	15.96	15.96	15.96	16.46
MD	Baltimore	11.82	16.49	17.89	19.19	19.27	19.27	19.65	19.65	19.65	19.65	20.01	20.01	20.01
MA	Boston	10.60	10.60	11.60	12.60	13.37	12.74	13.64	13.64	16.56	17.68	19.10	20.35	20.35
	Hyannis	8.95	8.95	9.95	10.95	11.14	11.14	12.04	12.04	15.13	16.25	17.91	20.35	20.35
	Springfield	10.05	10.05	11.05	12.05	12.78	12.20	13.10	13.10	16.07	17.19	19.10	20.35	20.35
MI	Detroit	10.65	11.86	12.86	14.08	14.68	13.23	14.59	14.35	14.33	14.48	14.50	14.50	14.46
	Grand Rapids Saginaw	9.72 9.26	10.84 10.33	11.84 11.33	13.28 12.55	13.66 13.15	12.21 11.70	13.57 13.06	13.33 12.82	13.31 12.80	13.46 12.95	13.46 12.97	13.48 12.97	13.95 12.93
MN	Detroit Lakes	10.72	10.72	14.98	16.19	16.58	15.80	16.51	16.51	16.51	16.51	16.51	16.51	16.51
	Minneapolis	11.66	11.66	16.20	17.20	17.76	16.76	17.66	17.66	17.66	17.66	18.08	18.08	18.08
MS	Pascagoula	17.25	17.25	18.25	21.25	20.85	20.85	21.75	21.75	21.75	21.75	21.75	21.75	21.75
MO	Kansas City	9.55	11.60	12.60	13.60	14.20	14.20	14.85	14.85	14.85	14.85	14.85	14.85	14.85
	Mexico	7.30	9.35	10.35	11.35	11.95	11.95	12.60	12.60	12.60	12.60	12.60	12.60	12.60
	St. Louis	9.55	11.60	12.60	13.60	14.20	14.20	14.85	14.85	14.85	14.85	14.85	14.85	14.85
MT NE	Butte Grand Island	8.18 8.92	8.36 13.69	12.54 14.19	15.04 17.44	15.71 19.00	16.33 18.00	17.34 18.90	17.34 18.90	17.34 18.90	17.34 18.90	17.34 18.90	17.34 18.90	17.34 18.90
NJ	Phillipsburg	6.70	7.00	8.45	9.45	10.05	10.05	10.95	10.95	10.95	10.95	10.95	10.95	10.95
NM	Alamogordo	10.47	15.37	17.81	18.78	18.80	18.91	19.40	17.16	16.84	17.09	18.11	18.28	18.45
NY	Binghamton	11.13	12.64	13.64	15.91	18.90	16.74	17.83	18.36	21.62	21.39	21.39	23.36	23.25
	Buffalo	13.96	18.85	16.85	21.52	21.72	22.63	23.73	24.42	28.13	27.85	27.85	29.84	27.43
	Massena	8.86	10.16	11.06	13.79	14.41	14.70	15.79	16.26	19.08	19.22	19.22	21.19	21.09
	New York City	11.63	11.98	12.98	16.14	14.68	18.13	19.25	19.79	22.68	22.47	22.47	22.45	22.35
	Ogdensburg	9.42	10.70	11.70	13.79	14.41	14.70	15.79	16.26	19.42	19.22	19.22	21.19	21.09
NC	Rochester	10.12	11.04	12.04	14.89	14.71	14.71	15.78	16.62	17.34	16.40	16.01	15.22	15.22
NC	Raleigh Rockingham	12.84 10.52	14.97 12.62	15.30 13.06	16.30 14.06	16.35 14.11	15.11 13.07	16.01 13.97	16.01 13.97	16.01 13.97	16.01 13.97	16.01 13.97	16.01 13.97	16.04 13.97
ОН	Canton	12.95	14.95	15.95	17.45	17.85	17.85	18.75	18.75	18.75	18.75	18.75	18.75	18.50
	Cincinnati	14.00	13.21	14.21	17.44	17.54	17.54	18.07	18.07	18.44	18.44	18.44	19.57	19.57

		s		•	Single P	arty) Re	eidentis	l Rotary	, Acces	e I ina				
		Private (Single Party) Residential Rotary Access Line Rates include Subscriber Line Charges. Rates are for unlimited calling where offered, and are for measured service with 100 five minute calls elsewhere. Rates exclude taxes.												
	Excludi	ng Surcha	arges			Including	Surcharg	es Accou	nted as C	ompany F	Revenue			
	1983	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993												
olumbus	\$12.95	\$14.95	\$15.95	\$17.45	\$17.93	\$17.85	\$18.75	\$18.75	\$18.75	\$18.75	\$18.75	\$18.75	\$18.50	
oledo	12.95	14.95	15.95	17.45	17.85	17.85	18.75	18.75	18.75	18.75	18.75	18.75	18.50	
orvallis	12.85	13.60	15.41	18.41	17.01	17.01	17.54	18.07	18.07	17.60	17.54	16.79	17.29	
ortland	13.30	15.88	17.33	20.33	19.18	19.05	19.58	20.17	20.17	19.43	19.60	16.79	18.84	
llentown	8.26	10.58	11.95	12.95	13.55	13.63	14.25	14.55	14.55	14.55	14.85	14.85	14.85	
llwood City	7.46	9.28	10.65	11.65	12.25	12.39	13.01	13.25	13.25	13.25	13.55	15.25	15.25	
ohnstown	11.25	11.26	13.11	15.06	15.66	14.65	16.61	16.57	17.18	16.88	16.82	17.28	17.14	
ew Castle	7.46	9.28	10.65	11.65	12.25	12.39	13.01	13.25	13.25	13.25	13.55	13.55	13.55	
hiladelphia	9.46	12.28	13.40	14.70	15.00	14.87	15.49	15.85	15.85	15.85	16.15	16.15	16.15	
ittsburgh	9.46	12.28	13.40	14.40	15.00	14.87	15.49	15.85	15.85	15.85	16.15	16.15	16.15	
cranton	7.86	10.58	11.95	12.95	13.55	13.63	14.25	14.55	14.55	14.55	14.85	14.85	14.85	
rovidence	15.80	15.80	18.68	19.68	19.24	19.24	20.14	20.14	20.14	20.14	20.39	20.76	20.76	
eaufort	11.50	11.50	12.50	13.50	12.95	16.63	17.53	17.53	18.27	18.27	18.27	18.27	18.27	
lemphis	12.65	13.15	14.15	15.15	15.75	15.75	16.65	15.65	16.43	16.43	16.43	16.43	16.43	
ashville	12.35	12.85	13.85	14.85	15.45	15.45	16.35	15.62	15.65	15.65	15.65	15.65	15.65	
rownsville	8.50	8.80	9.80	10.80	11.40	11.40	12.30	12.30	12.30	12.30	12.30	12.30	12.30	
orpus Christi	8.80	9.10	10.10	11.10	11.70	11.70	12.60	12.60	12.60	12.60	12.60	12.60	12.60	
allas	10.10	10.40	11.40	12.40	13.00	13.00	13.90	13.90	13.90	13.90	13.90	13.90	13.90	
ort Worth	9.55	9.85	10.85	11.85	12.45	12.45	13.35	13.35	13.35	13.35	13.35	13.35	13.35	
ouston	10.75	11.05	12.05	13.05	13.65	13.65	14.55	14.55	14.55	14.55	14.55	14.55	14.55	
an Antonio	9.55	9.85	10.85	11.85	12.45	12.45	13.35	13.35	13.35	13.35	13.35	13.35	13.35	
ogan	7.80	9.72	10.58	17.27	17.87	17.34	14.23	14.58	13.92	13.92	13.92	13.92	13.96	
ichmond	11.79	15.22	16.22	17.22	17.32	16.82	17.37	17.09	17.09	17.09	17.67	17.67	17.76	
mithfield	7.05	8.88	9.88	11.26	10.86	11.48	12.13	12.13	11.92	11.92	11.92	11.92	11.92	
verett	13.34	13.58	14.58	16.28	16.74	16.74	17.64	17.64	17.64	17.64	16.25	16.25	16.25	
eattle	12.50	12.89	13.89	15.00	14.22	14.10	15.00	15.46	15.37	15.29	16.01	15.96	15.16	
untington	16.80	19.42	24.39	25.39	25.99	25.99	25.50	25.50	25.50	25.50	25.50	25.50	25.50	
lilwaukee	13.00	17.50	18.20	18.65	19.15	19.15	18.44	20.05	15.10	15.10	15.10	14.50	14.50	
aaina	11.50	16.00	16.70	17.15	17.50	17.50	16.79	18.40	15.10	15.10	15.10	14.50	14.50	
roaciir	ownsville orpus Christi allas ort Worth ouston on Antonio ogan chmond mithfield verett seattle untington	ownsville 8.50 orpus Christi 8.80 allas 10.10 ort Worth 9.55 ouston 10.75 ous Antonio 9.55 ogan 7.80 ochmond 11.79 mithfield 7.05 orett 13.34 eattle 12.50 antington 16.80 diwaukee 13.00	ownsville 8.50 8.80 orpus Christi 8.80 9.10 allas 10.10 10.40 ort Worth 9.55 9.85 ouston 10.75 11.05 on Antonio 9.55 9.85 ogan 7.80 9.72 chmond 11.79 15.22 mithfield 7.05 8.88 verett 13.34 13.58 auttlington 16.80 19.42 ilwaukee 13.00 17.50	ownsville 8.50 8.80 9.80 orpus Christi 8.80 9.10 10.10 allas 10.10 10.40 11.40 ort Worth 9.55 9.85 10.85 ouston 10.75 11.05 12.05 an Antonio 9.55 9.85 10.85 ogan 7.80 9.72 10.58 chmond 11.79 15.22 16.22 mithfield 7.05 8.88 9.88 verett 13.34 13.58 14.58 antington 16.80 19.42 24.39 ilwaukee 13.00 17.50 18.20	rownsville 8.50 8.80 9.80 10.80 orpus Christi 8.80 9.10 10.10 11.10 oht Worth 9.55 9.85 10.85 11.85 ouston 10.75 11.05 12.05 13.05 an Antonio 9.55 9.85 10.85 11.85 opan 7.80 9.72 10.58 17.27 chmond 11.79 15.22 16.22 17.22 nithfield 7.05 8.88 9.88 11.26 verett 13.34 13.58 14.58 16.28 pattle 12.50 12.89 13.89 15.00 untington 16.80 19.42 24.39 25.39 llwaukee 13.00 17.50 18.20 18.65	rownsville 8.50 8.80 9.80 10.80 11.40 orpus Christi 8.80 9.10 10.10 11.10 11.70 allas 10.10 10.40 11.40 12.40 13.00 ort Worth 9.55 9.85 10.85 11.85 12.45 ouston 10.75 11.05 12.05 13.05 13.65 an Antonio 9.55 9.85 10.85 11.85 12.45 rigan 7.80 9.72 10.58 17.27 17.87 chmond 11.79 15.22 16.22 17.22 17.32 nithfield 7.05 8.88 9.88 11.26 10.86 verett 13.34 13.58 14.58 16.28 16.74 pattle 12.50 12.89 13.89 15.00 14.22 unithington 16.80 19.42 24.39 25.39 25.99 liwaukee 13.00 17.50 18.20 18.65 <td< td=""><td>rownsville 8.50 8.80 9.80 10.80 11.40 11.40 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 allas 10.10 10.40 11.40 12.40 13.00 13.00 buston 10.75 11.05 12.05 13.05 13.65 13.65 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 gan 7.80 9.72 10.58 17.27 17.87 17.34 chmond 11.79 15.22 16.22 17.22 17.32 16.82 nithfield 7.05 8.88 9.88 11.26 10.86 11.48 verett 13.34 13.58 14.58 16.28 16.74 16.74 pattle 12.50 13.89 15.00 14.22 14.10 unthgton 16.80 19.42 24.39 25.39 25.99 25.99 25.99 liwaukee 13</td><td>rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 12.60 allas 10.10 10.40 11.40 12.40 13.00 13.00 13.90 buston 10.75 11.05 12.05 11.85 12.45 12.45 13.35 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 13.35 angan 7.80 9.72 10.58 17.27 17.87 17.34 14.23 chmond 11.79 15.22 16.22 17.22 17.32 16.82 17.37 nithfield 7.05 8.88 9.88 11.26 10.86 11.48 12.13 verett 13.34 13.58 14.58 16.28 16.74 16.74 17.64 pattle 12.50 12.89 13.89 15.00 14.22 14.10 15.00</td><td>rownsville orpus Christi 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.30 allas 9.10 10.10 11.10 11.70 11.26 12.60 12.60 but Worth 9.55 9.85 10.85 11.85 12.45 13.35 13.35 buston 10.75 11.05 12.05 13.05 13.65 14.55 14.55 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 13.35 13.35 agan 7.80 9.72 10.58 17.27 17.87 17.34 14.23 14.58 chmond 11.79 15.22 16.22 17.22 17.32 16.82 17.37 17.09 mithfield 7.05 8.88 9.88 11.26 10.86 11.48 12.13 12.13 verett 13.34 13.58 14.58 16.28 16.74 16.74 17.64 17.64 pattle 12.50</td><td>rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.30 12.30 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 12.60 13.90</td><td>rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 13.35 13.35 13.35 13.35 13.35 <</td><td>rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.60 12.60 13.35 <</td><td>rownsville orpus Christi 8.50 8.80 9.80 10.80 11.40 11.40 12.30 13.35<</td></td<>	rownsville 8.50 8.80 9.80 10.80 11.40 11.40 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 allas 10.10 10.40 11.40 12.40 13.00 13.00 buston 10.75 11.05 12.05 13.05 13.65 13.65 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 gan 7.80 9.72 10.58 17.27 17.87 17.34 chmond 11.79 15.22 16.22 17.22 17.32 16.82 nithfield 7.05 8.88 9.88 11.26 10.86 11.48 verett 13.34 13.58 14.58 16.28 16.74 16.74 pattle 12.50 13.89 15.00 14.22 14.10 unthgton 16.80 19.42 24.39 25.39 25.99 25.99 25.99 liwaukee 13	rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 12.60 allas 10.10 10.40 11.40 12.40 13.00 13.00 13.90 buston 10.75 11.05 12.05 11.85 12.45 12.45 13.35 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 13.35 angan 7.80 9.72 10.58 17.27 17.87 17.34 14.23 chmond 11.79 15.22 16.22 17.22 17.32 16.82 17.37 nithfield 7.05 8.88 9.88 11.26 10.86 11.48 12.13 verett 13.34 13.58 14.58 16.28 16.74 16.74 17.64 pattle 12.50 12.89 13.89 15.00 14.22 14.10 15.00	rownsville orpus Christi 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.30 allas 9.10 10.10 11.10 11.70 11.26 12.60 12.60 but Worth 9.55 9.85 10.85 11.85 12.45 13.35 13.35 buston 10.75 11.05 12.05 13.05 13.65 14.55 14.55 an Antonio 9.55 9.85 10.85 11.85 12.45 12.45 13.35 13.35 agan 7.80 9.72 10.58 17.27 17.87 17.34 14.23 14.58 chmond 11.79 15.22 16.22 17.22 17.32 16.82 17.37 17.09 mithfield 7.05 8.88 9.88 11.26 10.86 11.48 12.13 12.13 verett 13.34 13.58 14.58 16.28 16.74 16.74 17.64 17.64 pattle 12.50	rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.30 12.30 orpus Christi 8.80 9.10 10.10 11.10 11.70 11.70 12.60 13.90	rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 13.35 13.35 13.35 13.35 13.35 <	rownsville 8.50 8.80 9.80 10.80 11.40 11.40 12.30 12.60 12.60 13.35 <	rownsville orpus Christi 8.50 8.80 9.80 10.80 11.40 11.40 12.30 13.35<	

		Appe	HUIX	4	Local Rate	s: 1983 -	- 1995							
				Rates	Conne do not inclu		nal charge	•	for drop li	ccess L		olock.		
		Excludin	g Surcha	rges			Including	Surcharg	jes Accou	nted as C	ompany F	Revenue		
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AL AK	Huntsville Anchorage	\$49.75 25.50	\$65.50 25.50	\$65.50 25.50	\$59.90 25.00	\$43.00 25.50	\$43.00 25.50	\$43.00 25.50	\$43.00 25.50	\$43.00 25.50	\$40.00 25.50	\$40.00 25.50	\$40.00 25.50	\$40.00 25.50
AZ	Tuscon	69.50	69.50	69.50	46.50	46.70	46.50	46.59	46.59	46.59	46.59	46.59	46.59	46.59
AR	West Memphis	51.85	51.85	45.00	45.00	45.00	39.70	39.70	39.70	39.70	39.70	39.70	39.70	39.70
	Pine Bluff	51.85	51.85	45.00	45.00	45.00	39.70	39.70	39.70	39.70	39.70	39.70	39.70	39.70
CA	Anaheim	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	Bakersfield	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	Fresno	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	Long Beach Los Angeles	22.00 23.00	40.00 34.50	40.00 34.50	44.70 36.38	41.14 34.94	38.74 33.50	40.05 33.12	49.00 33.12	54.79 34.59	55.25 34.30	55.25 34.11	52.89 33.95	45.73 33.87
	Oakland	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	Salinas	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	San Bernadino	22.00	40.00	40.00	44.70	41.14	38.74	40.05	49.00	54.79	55.25	55.25	52.89	45.73
	San Diego	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
	San Francisco	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
CO	San Jose	23.00	34.50	34.50	36.38	34.94	33.50	33.12	33.12	34.59	34.30	34.11	33.95	33.87
CO	Boulder Col. Springs	59.15 59.15	59.15 59.15	59.15 59.15	59.15 59.15	53.00 53.00	53.00 53.00	53.00 53.00	53.00 53.00	35.00 35.00	35.00 35.00	35.00 35.00	35.00 35.00	35.00 35.00
	Denver	59.15	59.15	59.15	59.15	53.00	53.00	53.00	53.00	35.00	35.00	35.00	35.00	35.00
СТ	Ansonia	37.75	37.75	37.75	37.75	37.75	37.75	37.75	35.73	35.73	35.73	45.00	45.00	45.00
	Norwalk	37.75	37.75	37.75	37.75	37.75	37.75	37.75	35.73	35.73	35.73	45.00	45.00	45.00
DC	Washington	9.00	25.00	25.00	32.15	31.57	32.27	32.87	32.68	33.12	30.76	30.76	30.76	30.76
FL	Miami	44.50	44.50	44.50	44.50	44.50	44.50	44.56	44.55	44.50	44.50	44.50	40.00	40.00
	Tampa	48.25	48.25	48.25	48.25	48.25	48.25	48.25	48.25	48.25	48.25	55.00	55.00	55.00
C A	W. Palm Beach	44.50	44.50 41.00	44.50	44.50	44.50	44.50	44.56	44.55	44.50	44.50	44.50	40.00	40.00
GA	Albany Atlanta	41.00 41.00	41.00	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50	42.50 42.50
HI	Honolulu	27.00	51.00	60.00	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50
IL	Chicago	33.00	36.88	44.50	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
	Decatur	33.00	36.88	44.50	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
	Rock Island	33.00	36.88	44.50	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
IN	Indianapolis	43.00	43.00	43.00	54.00	54.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00
IA	Terre Haute	31.55 19.00	31.55 19.00	31.55 19.00	31.55 19.00	31.55 16.90	57.20 16.90	57.20 16.90	57.20 16.90	57.20 9.35	57.20 9.35	57.20 9.35	57.20 9.35	57.20 9.35
KY	Fort Dodge Louisville	42.75	39.00	39.00	39.00	39.00	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50
LA	Baton Rouge	24.00	59.00	59.00	61.65	61.65	61.65	61.65	61.65	61.65	63.50	50.00	50.00	43.00
	New Orleans	24.00	59.00	59.00	61.65	61.65	61.65	61.65	61.65	61.65	64.12	51.50	50.00	43.00
ME	Portland	40.50	45.75	44.75	44.75	44.75	44.75	44.75	44.75	44.75	44.75	44.75	44.75	44.75
MD	Baltimore	24.53	37.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00
MA	Boston	32.75	32.75	32.75	32.75	31.77	31.77	31.77	31.77	34.79	37.07	37.07	37.07	37.07
	Hyannis Springfield	32.75 32.75	32.75 32.75	32.75 32.75	32.75 32.75	31.77 31.77	31.77 31.77	31.77 31.77	31.77 31.77	34.79 34.79	37.07 37.07	37.07 37.07	37.07 37.07	37.07 37.07
MI	Detroit	16.39	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
	Grand Rapids	16.39	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
	Saginaw	16.39	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
MN	Detroit Lakes	31.95	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	16.25	16.25	16.25	16.25
	Minneapolis	31.95	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	16.25	16.25	16.25	16.25
MS MO	Pascagoula Kansas City	24.50	65.50 39.00	56.50 39.00	65.50 47.40	33.50 47.40	33.50 47.40	33.50 36.50	33.50 36.50	33.50 36.50	33.50 36.50	46.00 36.50	46.00 36.50	46.00 36.50
IVIO	Mexico	21.90 21.90	39.00	39.00	47.40	47.40	47.40	36.50	36.50	36.50	36.50	36.50 36.50	36.50	36.50
	St. Louis	21.90	39.00	39.00	47.40	47.40	47.40	36.50	36.50	36.50	36.50	36.50	36.50	36.50
MT	Butte	30.00	33.00	43.15	44.15	44.15	35.30	35.30	35.30	35.30	35.30	35.30	35.30	25.00
NE	Grand Island	21.20	24.40	24.40	27.20	27.20	27.20	42.00	42.00	42.00	42.00	28.00	28.00	28.00
NJ	Phillipsburg	22.50	28.50	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
NM	Alamogordo	27.55	46.50	46.50	50.00	50.00	50.00	50.00	47.50	47.50	45.15	30.00	30.00	30.00
NY	Binghamton	46.00	55.50	55.50	60.84	54.71	56.91	56.91	58.55	59.00	58.40	58.40	58.34	58.07
	Buffalo Massana	46.00 46.00	55.50 55.50	55.50 55.50	60.84 60.84	54.71 54.71	57.45 57.10	57.45 57.10	59.08	60.04 59.20	59.43 58.59	59.43	59.38	59.10 58.26
	Massena New York City	46.00	55.50	55.50 55.50	60.84	54.71 54.71	58.12	57.10 58.12	58.73 59.76	60.27	59.72	58.59 59.72	58.54 59.66	58.26 59.39
	Ogdensburg	46.00	55.50	55.50	60.84	54.71	57.10	57.10	58.74	59.20	58.60	58.60	58.54	58.27
	Rochester	31.50	31.50	31.50	32.50	28.99	28.99	29.09	32.99	35.08	36.20	35.33	33.32	33.32
NC	Raleigh	42.10	47.00	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75
	Rockingham	42.10	47.00	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75	42.75
ОН	Canton	58.00	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50
	Cincinnati Cleveland	24.45 58.00	22.30 36.50	22.60 36.50	24.25 36.50	24.25 36.50	24.25 36.50	24.25 36.50	24.25 36.50	24.25 36.50	24.25 36.50	24.25 36.50	25.70 36.50	25.70 36.50
	Olevelariu	56.00	30.30	30.30	30.50	50.50	30.50	30.50	30.50	50.50	30.50	30.50	30.50	50.50

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					Conne	ection of	f a Rotai	rv Resid	lential A	ccess L	.ine			
				Rates d	o not includ			•				olock.		
							Rates e	exclude ta	xes.					
		Excludin	g Surcha	rges			Including	Surcharg	jes Accou	nted as C	ompany F	Revenue		
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	199
ОН	Columbus	\$58.00	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.50	\$36.5
	Toledo	58.00	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.5
OR	Corvallis	29.00	29.00	31.00	31.00	12.00	12.00	12.00	12.36	12.00	12.00	12.00	12.00	12.0
	Portland	29.00	29.00	31.00	31.00	12.00	12.00	12.00	12.36	12.00	12.00	12.00	12.00	12.0
PA	Allentown	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.0
	Ellwood City	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.0
	Johnstown	47.65	47.65	47.65	61.50	61.50	57.53	61.69	59.81	61.99	53.12	52.70	52.70	52.7
	New Castle	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.0
	Philadelphia	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.0
	Pittsburgh	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
	Scranton	28.50	53.50	53.50	53.50	53.50	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
RI	Providence	22.00	22.00	28.40	28.40	28.40	28.40	28.40	28.40	28.40	28.40	28.40	33.83	33.83
SC	Beaufort	25.50	25.50	25.50	25.00	35.00	32.30	32.30	32.30	32.30	32.30	32.30	32.30	32.3
TN	Memphis	26.40	51.50	51.50	51.50	41.50	41.50	41.50	41.50	43.58	43.58	43.58	43.58	43.5
	Nashville	26.40	51.50	51.50	51.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.5
TX	Brownsville	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
	Corpus Christi	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
	Dallas	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
	Fort Worth	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
	Houston	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
	San Antonio	64.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	38.35	38.35	38.35	38.35	38.3
UT	Logan	28.40	43.00	43.00	43.00	43.00	35.50	29.50	29.50	18.75	18.75	18.75	18.75	18.7
VA	Richmond	21.22	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.5
	Smithfield	11.00	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.2
WA	Everett	30.00	30.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	39.00	39.00	39.0
	Seattle	27.00	27.00	27.00	31.00	31.00	31.00	31.00	33.62	33.44	33.26	33.08	32.98	32.9
WV	Huntington	30.00	40.00	47.00	47.00	47.00	47.00	42.00	42.00	42.00	42.00	42.00	42.00	42.0
WI	Milwaukee	34.35	35.05	35.05	35.05	33.05	33.05	33.05	33.05	33.05	33.05	33.05	33.05	33.0
	Racine	34.35	35.05	35.05	35.05	33.05	33.05	33.05	33.05	33.05	33.05	33.05	33.05	33.0

		Appe	enaix	4	Local Rat	es: 1983	- 1995							
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			а		clude Subs r measure									
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		Exclud	ling Surch	arges				ncluding	Including	Surcharge	es			
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AL	Huntsville	\$41.95	\$45.15	\$53.20	\$54.20	\$52.79	\$53.53	\$53.93	\$53.93	\$53.93	\$54.28	\$53.98	\$53.04	\$48.99
AK AZ	Anchorage Tuscon	19.65 24.32	19.65 29.28	20.65 30.28	21.65 32.33	22.25 32.93	22.25 32.93	21.35 29.67	21.35 29.67	21.35 35.57	27.75 35.57	31.80 35.57	29.25 35.57	29.25 36.35
AR	West Memphis	30.95	35.00	39.61	40.46	41.06	41.06	41.96	45.98	45.98	45.98	45.98	44.23	44.23
, \	Pine Bluff	28.15	29.45	33.56	34.41	35.01	35.01	35.91	35.91	35.91	35.91	35.91	34.16	34.16
CA	Anaheim	22.70	26.05	27.05	28.05	28.65	28.65	28.19	26.33	27.72	27.49	27.34	27.21	28.15
	Bakersfield	23.30	26.55	27.55	28.55	29.15	29.25	28.76	26.86	28.32	28.08	27.93	27.80	28.73
	Fresno	24.10	27.35	28.35	29.35	29.95	30.05	29.52	27.58	29.11	28.87	28.72	28.58	28.73
	Long Beach	18.45 22.70	22.95 26.05	23.95	24.95 28.05	25.55	25.55	27.89 28.19	31.80	34.07 27.72	34.35 27.49	34.35 27.34	32.88	38.50
	Los Angeles Oakland	22.70	26.05	27.05 27.05	28.05	28.65 28.65	28.65 28.65	28.19	26.33 26.33	27.72	27.49	27.34	27.21 27.21	28.15 28.15
	Salinas	24.20	27.45	28.45	29.45	30.05	30.15	29.62	27.66	28.42	28.18	28.03	27.89	28.83
	San Bernadino	18.45	22.95	23.95	24.95	25.55	25.55	26.48	28.17	34.07	34.35	34.35	32.88	38.50
	San Diego	22.70	26.05	27.05	28.05	28.65	28.65	28.19	26.33	27.72	27.49	27.34	27.21	28.15
	San Francisco	22.70	26.05	27.05	28.05	28.65	28.65	28.19	26.33	27.72	27.49	27.34	27.21	28.15
00	San Jose	22.70	26.05	27.05	28.05	28.65	28.65	28.19	26.33	27.72	27.49	27.34	27.21	28.15
CO	Boulder	27.27	29.10	33.50	36.35	37.76 31.96	36.32	39.13	39.83	41.67	41.94	42.41	42.23	42.32
	Col. Springs Denver	22.22 26.53	23.80 28.41	27.56 32.71	30.07 35.52	36.97	30.65 35.53	32.83 38.10	35.49 39.62	39.12 41.59	39.74 41.90	40.59 41.92	40.73 42.00	40.81 42.10
СТ	Ansonia	29.33	29.33	30.33	31.33	31.93	31.93	32.08	32.08	32.41	32.41	38.29	37.33	40.03
0.	Norwalk	32.72	32.72	33.72	34.72	35.32	35.32	35.47	35.47	36.15	35.45	35.45	34.63	37.33
DC	Washington	18.49	32.35	33.35	30.30	30.14	29.68	32.68	31.70	31.84	31.16	32.69	31.47	31.46
FL	Miami	30.65	30.65	31.65	32.65	32.70	32.70	34.62	34.49	34.90	35.04	35.06	34.02	34.02
	Tampa	32.05	32.05	32.47	33.47	34.07	34.07	35.89	34.22	34.22	34.22	33.22	33.22	33.40
0.0	W. Palm Beach	27.30	27.30	28.30	29.30	30.20	30.20	31.92	32.74	32.22	32.55	32.55	31.53	31.53
GA	Albany Atlanta	29.85 41.65	34.00 43.30	36.05 44.35	37.05 45.35	36.90 45.95	36.90 46.20	38.93 48.69	38.93 48.69	37.80 47.57	35.30 47.57	35.30 47.57	35.30 47.57	35.30 52.32
HI	Honolulu	32.10	33.50	34.50	39.05	39.65	39.65	37.45	39.00	39.00	39.00	39.00	39.67	41.42
IL	Chicago	20.58	27.73	28.73	29.73	30.33	30.33	31.13	28.96	29.01	28.92	29.15	29.14	27.37
	Decatur	22.19	27.23	28.23	29.23	29.83	29.78	30.66	33.29	33.34	33.25	33.48	33.47	31.66
	Rock Island	24.13	29.18	30.18	31.18	31.78	31.73	32.61	33.29	33.34	33.25	33.48	33.47	31.66
IN	Indianapolis	47.25	53.75	58.40	64.08	56.18	54.41	55.31	55.96	55.96	55.09	55.01	52.44	51.73
	Terre Haute	39.83	39.83	41.83	43.57	43.96	40.99	41.89	42.89	42.89	42.89	42.89	42.89	42.89
IA KY	Fort Dodge Louisville	15.70 50.23	15.70 54.94	16.70 57.99	17.70 58.99	16.75 54.38	16.75 53.36	17.65 54.26	18.90 54.26	20.25 55.89	20.25 55.89	20.25 55.89	20.25 55.89	20.25 55.89
LA	Baton Rouge	36.15	38.60	40.25	41.25	43.85	45.61	46.51	46.51	48.18	48.18	48.05	45.22	45.22
	New Orleans	38.95	41.40	42.40	43.40	46.00	47.85	48.75	48.75	50.70	50.21	50.08	45.80	45.80
ME	Portland	29.54	32.90	37.69	42.35	36.35	36.21	37.11	37.11	37.11	37.11	37.11	37.11	35.36
MD	Baltimore	30.19	33.20	34.60	35.90	35.98	35.98	36.36	36.36	36.36	36.36	35.44	35.44	35.44
MA	Boston	33.52	33.52	34.52	33.72	33.22	33.22	34.12	34.12	40.14	50.02	46.02	39.96	39.56
	Hyannis	29.00	29.00	30.00	29.20 32.18	28.84	28.84	29.74 32.63	29.74 32.63	29.74 34.47	40.15	43.38	43.38	43.38 35.96
MI	Springfield Detroit	31.98 28.40	31.98 29.52	32.98 30.52	31.74	31.73 32.34	31.73 32.34	32.03	32.03	32.01	35.96 32.14	35.96 32.14	35.96 32.16	32.41
	Grand Rapids	28.40	29.52	30.52	31.74	32.34	32.34	32.25	32.01	32.01	32.14	32.14	32.16	32.41
	Saginaw	28.40	29.52	30.52	31.74	32.34	32.34	32.25	32.01	32.01	32.14	32.14	32.16	32.41
MN	Detroit Lakes	30.38	35.54	38.58	39.58	39.67	37.80	38.70	38.23	38.23	38.23	38.23	38.23	38.23
	Minneapolis	40.96	47.95	48.74	49.75	49.69	47.28	48.18	48.18	48.18	48.18	49.45	49.45	49.45
MS	Pascagoula Kansas City	45.80	45.80	46.80	48.80	49.40 41.20	49.40	50.30	50.30	50.30	50.30	50.30	50.30	50.30 37.05
MO	Mexico	32.70 23.05	38.55 28.10	39.55 29.10	40.60 30.15	30.75	41.20 30.75	40.93 30.48	40.93 30.48	40.93 30.48	40.93 30.48	40.93 30.48	37.77 27.32	26.60
	St. Louis	32.70	38.55	39.55	40.60	41.20	41.20	40.93	40.93	40.93	40.93	40.93	37.77	37.05
MT	Butte	31.58	32.06	45.07	46.87	43.58	43.79	45.00	43.59	43.59	43.59	42.19	42.19	42.19
NE	Grand Island	23.87	35.27	36.27	41.72	42.32	41.15	42.05	42.05	42.05	42.05	42.05	42.05	42.05
NJ	Phillipsburg	20.37	21.32	22.77	23.77	24.37	24.37	25.27	25.27	25.27	25.27	25.27	25.27	25.27
NM	Alamogordo	29.27	42.58	47.18	48.18	48.16	52.17	53.58	50.56	49.99	50.46	50.36	50.53	50.70
NY	Binghamton	28.90	29.48	30.48	35.49	36.09	36.09	39.69	40.84	47.21	46.36	46.36	44.79	44.58
	Buffalo Massena	28.90 28.22	29.48 31.49	30.48 32.49	35.49 37.44	36.09 36.09	36.09 36.09	40.45	41.60 40.97	48.04 47.37	47.18 46.51	47.18 46.51	45.59 44.95	45.38 44.73
	New York City	30.90	31.49	32.49	37.44	40.29	40.29	39.82 45.56	46.84	47.37 48.22	46.51	46.51	44.95	44.73
	Ogdensburg	31.58	31.58	32.46	41.93	42.53	42.53	46.12	47.47	47.37	46.51	46.51	44.95	44.74
	Rochester	29.34	29.34	31.15	32.32	32.53	32.53	41.88	42.65	45.88	46.16	45.04	44.60	44.44
NC	Raleigh	35.05	41.63	40.80	41.80	42.40	38.44	39.34	39.34	39.34	39.34	39.34	39.14	38.96
	Rockingham	29.61	35.13	34.58	35.58	36.18	32.77	33.67	33.67	33.67	33.67	33.67	33.47	33.22
ОН	Canton	33.30	37.20	40.76	41.76	42.16	42.16	43.06	43.06	43.06	43.06	43.06	43.06	42.81
	Cincinnati	42.58	40.30	41.30	49.12	50.22	49.57	49.75	49.75	50.12	50.12	50.12	51.52	51.33
<u> </u>	Cleveland	33.30	37.20	40.76	41.76	42.16	42.16	43.06	43.06	43.06	43.06	43.06	43.06	41.81

					lude Subs		e Charges	s. Rates a	are for unl	imited call	ing where			
			a	and are fo	r measure	d service	with 200 f	ve minute	calls else	where. R	ates exclu	ude taxes.		
		Exclud	ling Surch	narges			İ	ncluding	Including	Surcharge	es			
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ОН	Columbus	\$33.30	\$37.20	\$40.76	\$41.76	\$42.16	\$42.16	\$43.06	\$43.06	\$43.06	\$43.06	\$43.06	\$43.06	\$41.81
	Toledo	33.30	37.20	40.76	41.76	42.16	42.16	43.06	43.06	43.06	43.06	43.06	43.06	42.81
OR	Corvallis	35.65	40.06	41.06	44.06	41.46	41.46	41.34	41.70	43.37	36.57	36.57	36.57	35.02
	Portland	39.40	41.98	42.98	45.98	43.38	43.50	43.38	43.38	44.68	39.29	39.29	39.29	37.34
PA	Allentown	20.10	28.75	33.51	34.51	35.11	35.11	32.75	32.60	32.60	32.60	32.60	32.80	32.80
	Ellwood City	17.36	27.75	31.86	32.86	33.46	33.46	35.17	35.05	35.05	35.05	35.05	33.30	33.30
	Johnstown	26.38	26.38	29.16	32.20	32.80	32.80	33.80	33.77	35.00	34.39	36.23	33.12	32.87
	New Castle	17.36	27.75	31.86	32.86	33.46	33.46	35.17	35.05	35.05	35.05	35.05	35.40	35.40
	Philadelphia	19.51	21.75	24.81	25.81	26.41	26.41	27.89	27.75	27.75	27.75	27.75	27.90	27.90
	Pittsburgh	19.51	21.75	24.81	25.81	26.41	26.41	27.89	27.75	27.75	27.75	27.75	27.90	27.90
	Scranton	18.74	28.75	33.51	34.51	35.11	35.11	36.88	32.60	32.60	32.60	32.60	32.80	32.80
RI	Providence	35.60	35.60	39.48	39.03	39.75	39.75	40.65	40.65	40.57	43.95	43.95	43.41	39.01
SC	Beaufort	24.95	24.95	25.95	26.95	27.40	33.25	34.15	34.15	35.77	35.77	35.77	35.77	35.17
TN	Memphis	41.60	43.50	44.70	45.70	46.30	46.30	46.55	46.20	48.51	48.51	48.51	48.51	48.51
	Nashville	40.95	42.85	44.05	45.05	45.65	45.65	46.55	46.20	46.20	46.20	46.20	46.20	46.20
TX	Brownsville	21.90	22.65	23.65	24.65	25.25	25.25	26.15	26.15	25.90	25.90	25.90	25.45	25.45
	Corpus Christi	22.55	23.30	24.30	25.30	25.90	25.90	26.80	26.80	26.55	26.55	26.55	26.10	26.10
	Dallas	26.50	27.25	28.25	29.25	29.85	29.85	30.75	30.75	30.50	30.50	30.50	30.05	30.05
	Fort Worth	24.35	25.10	26.10	27.10	27.70	27.70	28.60	28.60	28.35	28.35	28.35	27.90	27.90
	Houston	29.50	30.25	31.25	32.25	32.85	32.85	33.75	33.75	33.50	33.50	33.50	33.05	33.05
	San Antonio	24.35	25.10	26.10	27.10	27.70	27.70	28.60	28.60	28.35	28.35	28.35	27.90	27.90
UT	Logan	23.51	30.83	32.16	36.79	37.39	35.24	34.90	32.54	28.71	28.71	28.71	28.71	28.75
VA	Richmond	38.49	53.93	54.93	55.93	56.03	55.53	55.43	54.68	54.68	54.68	56.54	56.54	56.54
• • •	Smithfield	16.75	22.36	23.36	24.36	24.96	24.96	25.61	25.61	25.46	25.46	25.46	25.46	25.46
WA	Everett	37.23	37.23	37.97	41.41	41.43	41.43	42.33	42.33	41.83	41.83	35.15	35.15	35.15
	Seattle	38.05	38.44	39.44	38.40	38.70	38.20	39.10	34.92	34.19	34.01	34.90	32.66	32.66
WV	Huntington	47.77	54.52	61.73	62.73	63.33	63.33	66.25	66.25	66.25	66.25	66.25	66.25	66.25
WI	Milwaukee	32.03	41.10	41.50	41.55	39.60	39.60	38.89	39.00	39.00	38.00	36.00	34.35	34.35
	Racine	31.23	40.30	40.70	40.75	39.60	39.60	38.89	39.00	39.00	38.00	36.00	36.00	36.00
		01.20	10.00	10.70	10.70	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	55.50

		Appe	TIUIX	. 4	Local Rat	es: 1983	i - 1995							
				Rates	Co do not incl		onal charg	ouch-To ges, if any exclude to	, for drop			block.		
		Exclud	ling Surch	narges				Including	Surcharge	es				
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AL	Huntsville	\$74.25	\$90.50	\$90.50	\$90.50	\$90.50	\$90.50	\$90.50	\$90.50	\$90.50	\$69.00	\$69.00	\$69.00	\$69.00
AK AZ	Anchorage Tuscon	34.25 106.50	34.25 106.50	34.25 106.50	34.25 46.50	34.25 46.50	34.25 63.00	34.25 63.12	34.25 63.12	34.25 56.11	34.25 56.11	34.25 56.11	30.75 56.11	30.75 56.11
AR	West Memphis	48.05	48.05	84.00	84.00	84.00	84.00	84.00	92.00	92.00	92.00	92.00	84.00	84.00
,	Pine Bluff	48.05	48.05	84.00	84.00	84.00	84.00	84.00	92.00	92.00	92.00	92.00	84.00	84.00
CA	Anaheim	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	Bakersfield	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	Fresno	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	Long Beach	41.00 39.75	60.75 75.00	60.75 75.00	60.75 75.00	60.75 75.00	60.75 75.75	60.83 75.75	74.30 75.75	83.08 70.42	83.78 69.83	83.78 69.46	80.20 69.12	84.33 68.95
	Los Angeles Oakland	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	Salinas	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	San Bernadino	41.00	60.75	60.75	60.75	60.75	60.75	60.83	74.30	83.08	83.78	83.78	80.20	84.33
	San Diego	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	San Francisco	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
	San Jose	39.75	75.00	75.00	75.00	75.00	75.75	75.75	75.75	70.42	69.83	69.46	69.12	68.95
co	Boulder	92.70	92.70	92.70	92.70	85.00	85.00	85.00	85.00	70.00	70.00	70.00	70.00	70.00
	Col. Springs Denver	92.70 92.70	92.70 92.70	92.70 92.70	92.70 92.70	85.00 85.00	85.00 85.00	85.00 85.00	85.00 85.00	70.00 70.00	70.00 70.00	70.00 70.00	70.00 70.00	70.00 70.00
СТ	Ansonia	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	65.00	65.00	65.00
0.	Norwalk	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	65.00	65.00	65.00
DC	Washington	25.00	69.00	69.00	69.00	67.76	66.03	70.57	70.16	71.09	66.03	66.03	66.03	66.03
FL	Miami	54.50	54.50	54.50	54.50	54.50	54.50	54.57	54.57	54.50	54.50	54.50	56.00	56.00
	Tampa	58.90	58.90	58.90	58.90	58.90	58.90	58.90	58.90	58.90	58.90	73.90	68.90	68.90
٠.	W. Palm Beach	54.50	54.50	54.50	54.50	54.50	54.50	54.57	54.57	54.50	54.50	54.50	56.00	56.00
GA	Albany	50.25 50.25	50.25	52.25	52.25	52.25	52.25	52.25 52.25	52.25	52.25	52.25 52.25	52.25	52.25	52.25 52.25
HI	Atlanta Honolulu	27.00	50.25 51.00	52.25 60.00	52.25 45.50	52.25 45.50	52.25 47.50	30.50	52.25 45.50	52.25 47.50	47.50	52.25 47.50	52.25 47.50	47.50
IL	Chicago	43.00	45.55	70.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	52.35
-	Decatur	43.00	45.55	70.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	52.35
	Rock Island	43.00	45.55	70.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	84.50	52.35
IN	Indianapolis	55.00	55.00	55.00	63.00	63.00	59.00	59.00	59.00	59.00	59.00	59.00	59.00	59.00
	Terre Haute	36.40	36.40	36.40	36.40	36.40	65.40	65.40	65.40	65.50	65.50	65.50	65.50	65.50
IA KY	Fort Dodge	52.95	52.95 72.50	52.95	52.95 47.50	49.90 47.50	24.95 47.50	24.95 47.50	24.95 47.50	14.90	14.90	14.90	14.90	14.90 47.50
LA	Louisville Baton Rouge	56.75 42.50	89.00	47.50 89.00	89.00	89.00	92.99	92.99	87.77	47.50 87.77	47.50 87.77	47.50 85.00	47.50 85.00	85.00
LA	New Orleans	42.50	89.00	89.00	89.00	89.00	92.99	92.99	87.77	87.77	87.77	85.00	85.00	85.00
ME	Portland	53.75	60.75	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00
MD	Baltimore	40.17	57.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	98.50	98.50	98.50
MA	Boston	44.75	44.75	44.75	44.75	43.41	43.41	43.41	43.41	88.89	93.02	93.02	93.02	93.02
	Hyannis	44.75	44.75	44.75	44.75	43.41	43.41	43.41	43.41	88.89	93.02	93.02	93.02	93.02
N 41	Springfield	44.75 22.90	44.75	44.75	44.75	43.41	43.41	43.41	43.41	88.89	93.02	93.02	93.02	93.02
MI	Detroit Grand Rapids	22.90	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00	42.00 42.00
	Saginaw	22.90	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
MN	Detroit Lakes	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	47.50	47.50	49.50	49.50
	Minneapolis	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	47.50	47.50	49.50	49.50
MS	Pascagoula	45.00	90.50	90.50	75.50	72.50	72.50	72.50	72.50	72.50	72.50	67.00	67.00	67.00
MO	Kansas City	26.90	62.50	62.50	84.25	84.28	84.25	52.25	60.00	60.00	60.00	60.00	60.00	52.25
	Mexico St. Louis	26.90	62.50	62.50	84.25	84.28	84.25	52.25	60.00	60.00	60.00	60.00	60.00	52.25
MT	St. Louis Butte	26.90 43.75	62.50 58.50	62.50 76.45	84.25 86.35	84.28 86.35	84.25 71.00	52.25 71.00	60.00 64.40	60.00 64.40	60.00 64.40	60.00 61.40	60.00 61.40	52.25 61.40
NE	Grand Island	32.00	36.15	36.15	40.25	40.25	40.25	66.00	66.00	66.00	66.00	66.00	45.00	45.00
NJ	Phillipsburg	54.00	66.00	79.50	79.50	79.50	79.50	79.50	79.50	79.50	79.50	79.50	79.50	79.50
NM	Alamogordo	36.60	63.00	63.00	77.00	77.00	77.00	70.00	70.00	60.95	60.95	60.95	53.95	53.95
NY	Binghamton	99.25	116.75	116.75	123.15	123.15	123.15	132.99	136.81	137.04	135.64	123.21	112.49	111.96
1	Buffalo	99.25	116.75	116.75	123.15	123.15	123.15	134.24	138.06	139.45	138.05	125.40	114.49	113.96
1	Massena	99.25	116.75	116.75	123.15	123.15	123.15	133.43	137.25	137.50	136.09	123.63	112.87	112.34
	New York City	99.25	116.75	116.75	123.15	123.15	123.15	135.83	139.64	139.98	138.70	126.00	115.04	114.51
1	Ogdensburg Rochester	99.25 52.75	116.75 52.75	116.75 52.75	123.15 54.00	123.15 54.00	123.15 34.00	133.44 35.33	137.26 35.33	137.51 55.71	136.10 55.29	123.64 53.96	112.88 52.93	112.35 52.93
NC	Raleigh	61.50	70.25	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50
	Rockingham	61.50	70.25	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50
ОН	Canton	79.00	58.65	58.65	58.65	58.65	58.65	81.45	72.15	72.15	72.15	72.15	72.15	62.85
	Cincinnati	44.55	44.55	44.55	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	55.78	55.78
	Cleveland	79.00	58.65	58.65	58.65	58.65	58.65	81.45	72.15	72.15	72.15	72.15	72.15	62.85

		-	JI IGIA	-	Local Ital) - 1990							
						nnectio								
				Rates	do not incl	ude additi		ges, if any exclude to		line and c	onnection	block.		
							Maics	exclude to	anes.					
		Exclud	ding Surch	narges				Including	Surcharge	es				
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ОН	Columbus	\$79.00	\$58.65	\$58.65	\$58.65	\$58.65	\$58.65	\$81.45	\$72.15	\$72.15	\$72.15	\$72.15	\$72.15	\$62.85
	Toledo	79.00	58.65	58.65	58.65	58.65	58.65	81.45	72.15	72.15	72.15	72.15	72.15	62.85
OR	Corvallis	46.00	46.00	48.00	48.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
	Portland	46.00	46.00	48.00	48.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
PA	Allentown	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Ellwood City	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Johnstown	50.95	50.95	50.95	61.50	61.50	61.50	61.69	59.81	61.99	56.56	56.56	57.10	57.02
	New Castle	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Philadelphia	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Pittsburgh	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Scranton	74.50	82.00	82.00	82.00	82.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
RI	Providence	29.00	29.00	37.45	37.45	37.45	37.45	37.45	37.45	37.45	37.45	37.45	44.61	44.61
SC	Beaufort	29.50	29.50	29.50	29.50	29.50	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60
TN	Memphis	53.20	64.80	58.50	58.50	58.60	58.50	58.50	58.50	61.43	61.43	61.43	61.43	61.43
	Nashville	53.20	64.80	58.50	58.50	58.60	58.50	58.50	58.50	58.50	58.50	58.50	58.50	58.50
TX	Brownsville	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
	Corpus Christi	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
	Dallas	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
	Fort Worth	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
	Houston	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
	San Antonio	69.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.05	62.05	62.05	59.65	59.65
UT	Logan	42.60	52.00	76.50	76.50	76.50	76.50	76.50	66.50	50.00	50.00	50.00	50.00	50.00
VA	Richmond	42.44	64.00	64.00	64.00	64.00	64.00	64.00	64.00	64.00	64.00	64.00	64.00	64.00
	Smithfield	13.00	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25
WA	Everett	54.00	54.00	53.00	53.00	53.00	53.00	53.00	53.00	39.00	39.00	39.00	53.00	53.00
	Seattle	43.00	43.00	48.00	48.00	48.00	48.00	48.00	52.06	51.78	51.50	51.23	51.06	51.06
WV	Huntington	95.55	95.55	96.90	96.90	96.90	96.90	96.90	96.90	96.90	96.90	96.90	96.90	96.90
WI	Milwaukee	44.65	44.65	44.65	44.65	44.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65
	Racine	44.65	44.65	44.65	44.65	44.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65	64.65
		4												

APPENDIX 5 Local Service Rate Averages by Company

This appendix compares data in the Statistics of Communications Common Carriers (SOCC), Federal Communications Commission, 1993/1994, 1994/1995, and 1995/1996 with the rate averages from the Industry Analysis Division's Urban Rates Survey. Because the Urban Rates Survey does not include rural areas where rates tend to be lower, the survey shows somewhat higher rates than would be calculated if rural areas were included. Similarly, the Urban Rates Survey residential average is based on single party unlimited flat rate service and does not reflect lower rates paid by many households. In addition, the revenue based figures represent totals, while the survey data represents rate averages as of October 15. Given these differences in definition, the survey averages are as consistent with the data in the SOCC as can be expected.

The largest local exchange carriers (LECs) -- those having regulated telecommunications revenues exceeding \$100 million per year -- report annual revenues using the account structure prescribed by the Uniform System of Accounts (USOA), part 32 of the FCC rules. These companies provide plant, expense, and revenue account data, along with various operating statistics, in their annual Automated Regulatory Management Information System (ARMIS) filings. The data are summarized and published in the SOCC.

The first block of figures in Tables A5:1-3 show estimates of the average number of access lines. The estimates are based on the year end figures for access lines in 1993, 1994, and 1995, provided in SOCC Table 2-10. Generally, the RBOCs report that about 10% of business access lines are for single-line customers, while 90% are for multi-line customers. These percentages were used to divide total business access lines into single and multi-line counts for carriers whose breakdowns did not appear to be reliable. The total end user access lines shown in the A5 tables do not include digital access lines, special access lines, or access lines used for LEC pay telephones, but do include WATS and 800 service lines. Reporting carriers, which provide about 92% of the pre-subscribed lines, had about 140.3 million end user access lines during 1995, of which about 68.6% were used by residential customers.

The second block of figures in Tables A5:1-3 contain summaries of revenue and plant accounts. Basic area revenue is reported in account #5001, and includes revenue derived from the provision of basic area message services such as flat rate services and measured services. The account includes local area message charges, but excludes toll charges. The account also includes amounts paid by businesses so that the telephone company will place a semi-public pay telephone on the business's premise. Actual coin revenues are reported in Account #5010 and are not shown separately in Tables A5:1-3.

Revenues from federal subscriber line charges are reported in Account # 5081 -- End user revenues. A small amount of state subscriber line charges are included in Account #5084 -- State access revenues. The sum of basic area revenues and end user revenues is identified in Tables A5:1-3 as "Primary Access Service" revenues, and approximates the revenues carriers receive for providing basic local service.

Tables A5:1-3 show other local exchange revenues, which are the revenues reported in Account #5060. That account includes revenue from the provision of secondary features such as touch-tone line service, call forwarding, call waiting and caller identification services. The account includes provision of public announcement, directory assistance and non-toll call completion services. The account also includes central office related service connection and termination charges and other non-premise customer specific charges associate with public network services.

Tables A5:1-3 also show a category titled "Toll Related" revenues. This summarizes toll revenues and access revenues other than end user charges. The category "Toll" summarizes message toll service and unidirectional service revenues such as WATS and 800 service. The other network access revenues include Accounts #5082 -- Switched access revenue; #5083 -- Special Access Revenue; and #5084 -- state access revenues. Taken together, these accounts approximate the revenues that local exchange carriers derive from toll customers using the public switched network.

Tables A5:1-3 sum primary access service, other local exchange, and toll related revenues in a category labeled "Basic Network Revenues". Basic network revenues represented 84.5% of Total Operating Revenues in 1995.

The third block of figures in Tables A5:1-3 show several categories of revenue on a per access line per month basis. The average number of access lines shown in Table A5-1 include dedicated WATS and 800 lines. Revenue from these customers are not included in primary access service or other local exchange revenue accounts. The average number of business access lines was reduced by 5% for calculating primary access service revenue per line, and other local exchange revenue per line. Toll revenues include WATS and 800 service revenues, so the line counts were not adjusted for calculating toll related revenue per access line.

In 1995, Tier 1 telephone companies collected an average of \$23.20 per month for each access line for providing primary access service -- that is, basic local service and access to the toll network. This represented an increase over the \$21.98 per month collected in 1994, and the \$20.62 per month collected in 1990. The carriers collected an average of \$5.56 per month per line for other local services such as touch-tone, call forwarding, and connection charges. Toll service revenues and related network access charges account for 40% of LEC revenues. Taken together, these toll related revenues amount to \$19.21 per access line per month.

The fourth block in Tables A5:1-3 shows the October average rates for basic service and subscriber line charges. The figures in the table include surcharges that are accounted for as revenue, but exclude taxes. Touch-tone charges are shown separately. The residential rate is for unlimited service, or measured service with 100 five minute calls if unlimited service is not offered. The business rates are for unlimited service, or measured service with 200 five minute calls if unlimited service is not offered.

The fourth block in Tables A5:1-3 also shows weighted averages of residential and business rates for basic service and additional charges for touch-tone service. Rates were weighted in proportion to 1995 access lines, with business lines reduced by 5% to reflect WATS and 800 lines. The weighted average basic service rate should be roughly comparable to the primary access service revenue per month per line described above.

As of October 1995 the local service and subscriber line charges for an access line averaged \$23.81 for the 95 cities in the sample. This figure exceeds the revenue per line estimate by \$0.61 per month. Several factors may account for this difference. The survey is drawn from urban areas. Almost 20% of the population lives in rural areas, and more than three quarters of all rural customers are served by the reporting carriers. Most carriers charge lower basic rates in rural areas. Thus, the weighted average reflects an average of urban rates, and is higher than it would be if rural areas had been included in the sample design. Another bias results from using December 31 line counts, since lines have been changing through out the year, this lowers the calculated revenue per line estimates.

The Urban Rates Survey also reflects the assumption that all residential customers take single party unlimited service where offered. Lower rate service options are available in most areas, and some customers use these services.

At one time some carriers included company official or internally used lines in the access line totals reported to the FCC. The carriers have been instructed to exclude these lines. The revenue per line estimates would be artificially low to the extent that company official lines were included in the access line counts.

For some companies, the usage assumptions underlying the rate averages may account for some of the difference between rate averages and revenues per line. The rate averages were calculated using unlimited service. If measured service was not offered in a city, the measured service rate plus a fixed number of calls was used to calculate an equivalent to the unlimited service rate. In 1995, residential customers in Wisconsin, New York City, and Chicago, had to take measured service. The local rate in those cities was calculated as the measured service rate plus 100 five minute calls. The nationwide averages are not very sensitive to the choice of 100 five minute calls because telephone companies offered unlimited service in the remaining 91 cities. However, the NYNEX and Ameritech rate averages would change if a different number of messages were used to calculate the equivalent to unlimited service rates. The rate averages are less than the revenue averages for these RBOCs, suggesting that

measured rate customers probably average more calling than the assumption. The 100 call assumption has been retained so that rate averages are consistent with averages published for prior years.

A much greater percentage of business customers are required to take measured service. Business customers in 42 of the sample cities were required to take measured service. The representative rate was calculated using the measured service rate in these 42 cities plus the cost of 200 five minute calls. The Pacific Telesis rate average would have been almost \$3 lower if 125 calls had been used instead of 200 calls. The 200 call assumption is probably high in states like California and New Jersey, which have relatively small local calling areas. The 200 call assumption is probably low in some other areas.

Tables A5:1-3 show that carriers collected an average of \$5.56 per month per access line for other local exchange services. Weighted by access lines, the average touch-tone charge was \$0.66 per access line in 1995. However, some customers continue to take rotary service. Connection charges are another significant component of account #5060. While connection charges average more than \$40 per line, only 10% to 20% of access lines are connected each year. Connection charges probably represented about \$.50 of the \$5.56 per month per access line recorded for other local exchange services. Other optional services, such as call forwarding and caller identification, probably accounted for about \$4.00 in revenue per month per access line, and represent about 6% of total operating revenue.

In addition to providing nationwide figures, Tables A5:1-3 show data for the seven Regional Bell Operating Companies (RBOCs) and for "Other reporting" carriers. The other reporting carriers include Cincinnati Bell, Southern New England Telephone, AllTel, Central Telephone, Citizens, Commonwealth, Contel, GTE, Lincoln, Puerto Rico Telephone, Rochester Telephone, and United. Table 2.3 in the SOCC shows that the RBOCs provided about 76.8% of the presubscribed access lines in the United States in 1995. The other reporting carriers provided about 15.8% of the presubscribed access lines. The non-reporting carriers provided about 7.4% of presubscribed access lines, primarily in rural areas.

The rate averages by company presented in Tables A5:1-3 are not as reliable as the nationwide average estimates. The Regional Bell Operating Company (RBOC) samples range from 9 to 13 cities, and each LEC represents between 9% and 17% of the overall sample weight. The independent carriers are represented by 15 sample cities, providing 12% of the sample weight. These are very small samples, so the averages presented in the table should be used cautiously.

Figure 34 shows revenues per access line and average local rate levels by company. This graph shows agreement between the revenues and rate averages by company. The largest differences are for NYNEX and BellSouth. BellSouth has relatively

high flat rate charges for business customers. It is possible that many low usage

Figure 34

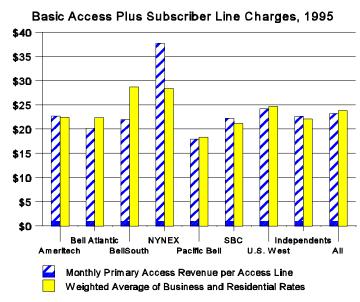
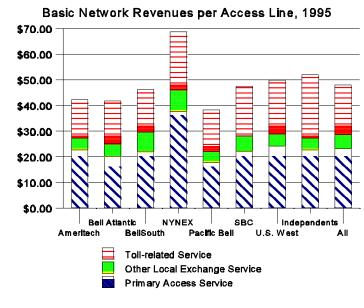


Figure 35



business customers reduced their bills by substituting measured service. BellSouth may also have a high proportion of lines in lower rated rural areas. As noted above, business customers in California are required to take measured service. Because of the relatively small local calling areas, California customers probably average less than the 200 calls per month used in estimating the average rate level. Customers of NYNEX are also required to take measured service, however in their case 200 calls may be a low estimate.

Figure 34 that shows companies have widely varying local rate levels. These differences are not a good indicator of overall differences in cost. Because of differences in toll rates and toll usage patterns, some carriers have significantly higher toll related revenues than other carriers. Figure 35 shows monthly revenues per access line for basic area service. other local exchange services, and toll related categories. The total represents basic network service revenues. The graph shows that there is less disparity in overall basic network service revenues than there are for any of the components. Thus, low local service rates may reflect the availability of toll revenue to cover a greater share of total cost.

Table A5-1Selected Data by Local Exchange Telephone Company - 1993

	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific Bell	SBC	U.S. West	Independents	Total
		Fs	timated avera	age level of a	ccess lines 1	993 *			
Residential	11,499,283		13,494,768		9,400,440	8,899,897	9,625,182	18,758,976	94,369,719
Single-Line Business	497.992		557,066	459.275	588,548	335,179	358,291	1,579,742	4,779,475
Multi-Line Business	4,481,927	,		4,133,474	5,296,932	3,283,284	3,224,615	4,438,811	33,738,148
Total end user lines	16,479,202				15,285,920			24,777,528	
Total cha door lines	10,110,202	11,010,110	17,070,070	10,000,202	10,200,020	12,010,000	10,200,007	21,111,020	102,007,012
		Rev	enues and P	lant reported	for 1993 in \$	0000 **			
Basic area	\$3,765,949					\$2,689,455	\$3,134,351	\$5,173,836	\$28,825,484
End user	\$746,406	\$825,130	\$904,006	\$909,691	\$635,411	\$598,444	\$625,006	\$1,157,647	\$6,401,741
Primary Access Service (1)	\$4,512,355		\$4,864,267	\$5,581,396	\$2,597,434	\$3,287,899	\$3,759,357	\$6,331,483	\$35,227,225
Other local exchange (2)	\$817,724	\$962,479	\$1,689,951	\$1,316,509	\$830,331	\$856,988	\$570,434	\$1,327,235	\$8,371,651
Toll	\$1,221,594	\$1,421,610	\$1,051,440	\$929,597	\$2,099,445	\$935,096	\$1,432,650	\$2,906,895	\$11,998,327
Other Network Access	\$1,990,993		\$2,986,368		\$1,678,097		\$2,227,757	\$5,133,457	
Toll Related (3)	\$3,212,587	\$3,716,522	\$4,037,808	\$3,409,206	\$3,777,542	\$3,022,098	\$3,660,407	\$8,040,352	\$32,876,522
Basic Network Revenues									
(1)+(2)+(3)	\$8,542,666			\$10,307,111	\$7,205,307	\$7,166,985	\$7,990,198	\$15,699,070	\$76,475,398
Other Local	\$478,613	\$640,872	\$1,002,327	\$531,645	\$723,854	\$372,434	\$153,148	\$583,003	\$4,485,896
Private Line and Other Toll	,.		\$168,075	\$210,530	(\$36,182)		\$7,709	\$278,399	\$1,036,123
Miscellaneous & all other	\$910,044	<u>\$528,989</u>	\$1,166,438	<u>\$782,462</u>	\$246,829	\$522,853	\$491,43 <u>9</u>	\$2,316,434	\$6,965,488
Total Operating Revenue	\$10,111,271	\$10,278,325	\$12,928,866	\$11,831,748	\$8,139,808	\$8,153,487	\$8,642,494	\$18,876,906	\$88,962,905
Basic Network Revenue as									
% of Total Operating									
Revenue	84.5%	87.3%	81.9%	87.1%	88.5%	87.9%	92.5%	83.2%	86.0%
Total Plant In Service	¢26 657 220	¢20 700 112	¢20 444 E40	\$20.060.40 7	\$24 DEE 074	¢25 076 242	¢27 270 702	\$54,710,347	¢250 701 742
								\$33,686,791	
				enues per ac					
Primary Access Service	\$22.82		\$22.94	\$30.27	\$14.16	\$21.89	\$23.72	\$21.29	\$22.09
Other local exchange	\$4.14		\$7.97	\$7.14	\$4.53	\$5.70	\$3.60	\$4.46	\$5.25
Toll related	<u>\$16.25</u>		<u>\$19.04</u>	<u>\$18.49</u>	<u>\$20.59</u>	\$20.12	\$23.09	<u>\$27.04</u>	<u>\$20.62</u>
Basic Network Revenues	\$43.20	\$42.53	\$49.94	\$55.90	\$39.28	\$47.71	\$50.41	\$52.80	\$47.96
			Octobe	r 1993 Rate	Averages				
	Monthly ra	ate for service	including mes	sage charges	and the Fede	ral Subscriber	Line charge.		
Residential	\$15.99	\$17.77	\$17.62	\$21.44	\$11.63	\$14.08	\$17.49	\$15.85	\$16.77
Single-Line Business	\$33.67	\$34.44	\$41.98	\$43.19	\$27.52	\$30.05	\$42.62	\$34.11	36.27
Multi-Line Business - Key	\$35.80	\$35.21	\$65.67	\$45.39	\$28.45	\$38.58	\$46.64	\$43.54	42.55
Multi-Line Business - PBX	\$37.02	\$40.89	\$68.93	\$46.74	\$32.28	\$43.39	\$51.85	\$49.73	46.13
Weighted Averages									
For access line	\$21.86	\$24.00	\$28.15	\$28.46	\$18.51	\$21.29	\$25.61	\$22.27	24.19
Additional for touch-tone	\$1.68	\$1.44	\$1.61	\$1.91	\$0.00	\$1.99	\$0.40	\$0.85	1.31
	Connection o	f a touch-tone	line assuming	that the drop	line and conn	ection block is	s already pres	ent	
Residential	\$46.05	\$40.35	\$45.07	\$54.14	\$34.11	\$39.47	\$26.63	\$41.14	\$42.42
First Business Line	\$67.64	\$77.07	\$62.65	\$110.64	\$69.46	\$64.50	\$54.19	\$54.08	\$72.58
Additional Business Lines									
including hunting	\$33.82	\$55.79	\$24.78	\$48.99	\$113.63	\$44.37	\$61.23	\$33.61	\$50.15

^{*} Year end figures are provided in Table 2-10 of Statistics of Communications Common Carriers. The year average levels for residential lines are the average of the year end 1992 and the 1993 statistics. In general, the RBOC's have approximately 10% of their business lines going to single-line businesses, with the other 90% going to multi-line businesses.

^{**} The Revenue and Plant data are summarized from the 1992/93 Statistics of Communications Common Carriers.

Table A5-2 Selected Data by Local Exchange Telephone Company - 1994

\$682,433 \$6,141,895 18,537,701 \$3,925,943 \$807,124 \$4,733,067	\$12,122,878 \$401,661 \$5,413,610 \$17,938,149 Rev \$3,568,169 \$882,403	\$13,944,027 \$558,229 \$3,855,356 \$18,357,612 enues and Pl	\$15,754,503	\$9,559,345 \$567,962 <u>\$5,111,662</u>	\$9,106,038 \$334,124 \$3,497,067	\$374,857 \$3,373,710	\$4,831,537	\$96,911,950 \$4,211,749 \$37,905,739
\$682,433 \$6,141,895 18,537,701 \$3,925,943 \$807,124 \$4,733,067	\$12,122,878 \$401,661 \$5,413,610 \$17,938,149 Rev \$3,568,169 \$882,403	\$13,944,027 \$558,229 \$3,855,356 \$18,357,612 enues and Pl	\$10,985,036 \$476,947 \$4,292,520 \$15,754,503	\$9,559,345 \$567,962 <u>\$5,111,662</u>	\$9,106,038 \$334,124 \$3,497,067	\$374,857 \$3,373,710	\$1,602,155 \$4,831,537	\$4,211,749
\$682,433 \$6,141,895 18,537,701 \$3,925,943 \$807,124 \$4,733,067	\$401,661 \$5,413,610 \$17,938,149 Rev \$3,568,169 \$882,403	\$558,229 \$3,855,356 \$18,357,612 enues and Pl	\$476,947 \$4,292,520 \$15,754,503	\$567,962 \$5,111,662	\$334,124 \$3,497,067	\$374,857 \$3,373,710	\$1,602,155 \$4,831,537	\$4,211,749
63,925,943 \$807,124 64,733,067	\$5,413,610 \$17,938,149 Rev \$3,568,169 \$882,403	\$3,855,356 \$18,357,612 enues and Pl	\$4,292,520 \$15,754,503	\$5,111,662	\$3,497,067	\$3,373,710	\$4,831,537	
8,537,701 63,925,943 \$807,124 64,733,067	\$17,938,149 Rev \$3,568,169 \$882,403	\$18,357,612 enues and Pl	\$15,754,503					
\$3,925,943 \$807,124 \$4,733,067	Rev \$3,568,169 \$882,403	enues and Pl			+,,		\$25.980.128	
\$807,124 64,733,067	\$3,568,169 \$882,403						420,000,120	<u> </u>
\$807,124 64,733,067	\$882,403	\$4 119 245	ant reported fo	or 1994 in \$0	00 **			
64,733,067		Ψ ·, · · · · , - · · ·	\$4,823,415	\$2,146,889	\$2,737,297	\$3,242,367	\$5,302,092	\$29,865,417
		\$950,842	\$965,166	\$653,782	\$650,516	\$679,829	\$1,208,641	\$6,798,303
	\$4,450,572	\$5,070,087	\$5,788,581	\$2,800,671	\$3,387,813	\$3,922,196	\$6,510,733	\$36,663,720
\$925,295	\$1,028,747	\$1,720,049	\$1,304,971	\$742,575	\$850,463	\$660,884	\$1,490,906	\$8,723,890
1,265,035	\$1,426,556	\$1,011,532			\$824,469			\$11,785,871
2,014,154	\$2,381,575	\$3,202,321	\$2,491,491	\$1,753,190	\$2,206,496			\$21,700,552
3,279,189	\$3,808,131	\$4,213,853	\$3,372,507	\$3,863,916	\$3,030,965	\$3,609,780	\$8,308,082	\$33,486,423
20.027.551	#0 207 452	¢44 000 000	£10,400,050	67 407 400	67.000.044	#0.400.000	£46 200 701	#70 074 000
								\$78,874,033
					. ,	. ,		\$4,624,026
, .		. ,			. ,			\$940,823
								\$8,489,023
0,458,625	\$11,905,086	\$13,596,817	\$11,982,323	\$8,180,171	\$8,355,072	\$8,890,812	\$19,558,999	\$92,927,905
85.5%	78.0%	80.9%	87.3%	90.6%	87.0%	92.1%	83.4%	84.9%
5,863,674	\$18,998,012	\$23,105,268	\$17,309,135	\$14,991,604	\$15,204,554	\$17,221,014	\$33,686,791	\$156,380,052
	Rasio	network rev	enues ner acc	ess line ner	month			
\$21.28						\$23.89	\$20.88	\$21.98
								\$5.23
								\$20.07
\$40.18	\$43.15	\$49.95	\$55.36	\$40.51	\$46.82	\$49.90	\$52.31	\$47.28
		October	1004 Rate A	verages				
Monthly ra	ate for service				al Subscriber L	ine charge.		
\$15.91	\$17.75	\$17.57	\$21.71	\$11.63	\$14.19	\$17.29	\$15.82	\$16.79
\$33.57	\$34.53	\$42.05	\$42.76	\$27.52	\$30.22	\$39.75	\$33.66	\$35.91
\$35.97	\$35.29	\$64.88	\$45.15	\$28.45	\$38.80	\$47.02	\$43.77	\$42.53
\$36.92	\$40.96	\$69.49	\$46.51	\$28.45	\$43.61	\$51.49	\$46.98	\$45.37
				\$17.66				\$24.49
\$1.69	\$1.36	\$1.08	\$1.43	\$0.00	\$0.62	\$0.40	\$0.84	\$1.02
onnection of	f a touch-tone	line assuming	that the drop li	ne and conne	ction block is	already prese	nt	
\$46.03	\$40.37	\$43.73	\$54.32	\$34.11	\$38.29	\$26.63	\$40.77	\$42.12
\$67.64	\$77.07	\$62.87	\$103.39	\$69.46	\$62.32	\$51.78	\$53.22	\$70.84
\$33.82	\$55.79	\$23.71	\$53.19	\$113.63	\$42.19	\$65.38	\$33.48	\$50.88
20	2,014,154 3,279,189 8,937,551 \$493,630 \$192,151 8835,293 0,458,625 85.5% 6,657,238 5,863,674 \$21.28 \$4.16 \$14.74 \$40.18 Monthly ra \$15.91 \$33.57 \$35.97 \$36.92 \$23.12 \$1.69 connection of \$46.03 \$67.64	2.014.154 \$2.381,575 \$3,279,189 \$3,808,131 \$9,287,450 \$493,630 \$666,126 \$192,151 \$128,912 \$835,293 \$0,458,625 \$11,905,086 \$85.5% 78.0% 6,657,238 \$29,788,112 5,863,674 \$18,998,012 \$21.28 \$20.68 \$4.16 \$4.78 \$14.74 \$17.69 \$40.18 \$43.15 \$\$\$ Monthly rate for service \$15.91 \$17.75 \$33.57 \$34.53 \$35.97 \$35.29 \$36.92 \$40.96 \$23.12 \$24.05 \$1.69 \$1.36 \$	2.014.154 \$2,381.575 \$3,202.321 3,279,189 \$3,808,131 \$4,213,853 8,937,551 \$9,287,450 \$11,003,989 \$493,630 \$666,126 \$1,125,714 \$192,151 \$128,912 \$178,576 \$835,293 \$1.822.598 \$1.288,538 0,458,625 \$11,905,086 \$13,596,817 85.5% 78.0% 80.9% 6,657,238 \$29,788,112 \$39,444,549 5,863,674 \$18,998,012 \$23,105,268 Basic network rev \$21.28 \$20.68 \$23.02 \$4.16 \$4.78 \$7.81 \$14.74 \$17.69 \$19.13 \$40.18 \$43.15 \$49.95 Monthly rate for service including mess \$15.91 \$17.75 \$17.57 \$33.57 \$34.53 \$42.05 \$35.97 \$35.29 \$64.88 \$36.92 \$40.96 \$69.49 \$23.12 \$24.05 \$28.31 \$1.69 \$1.36 \$1.08 Innection of a touch-tone line assuming \$46.03 \$40.37 \$43.73 \$67.64 \$77.07 \$62.87	2.014.154 \$2.381.575 \$3.202.321 \$2.491.491 3,279,189 \$3,808,131 \$4,213,853 \$3,372,507 8,937,551 \$9,287,450 \$11,003,989 \$10,466,059 \$493,630 \$666,126 \$1,125,714 \$524,762 \$192,151 \$128,912 \$178,576 \$20,963 \$835,293 \$1.822,598 \$1.288,538 \$790,539 0,458,625 \$11,905,086 \$13,596,817 \$11,982,323 85.5% 78.0% 80.9% 87.3% 6,657,238 \$29,788,112 \$39,444,549 \$30,060,497 5,863,674 \$18,998,012 \$23,105,268 \$17,309,135 Basic network revenues per acc \$21.28 \$20.68 \$23.02 \$30.62 \$4.16 \$4.78 \$7.81 \$6.90 \$14.74 \$17.69 \$19.13 \$17.84 \$40.18 \$43.15 \$49.95 \$55.36 October 1994 Rate A Monthly rate for service including message charges a \$15.91 \$17.75 \$17.57 \$21.71 \$33.57 \$34.53 \$42.05 \$42.76 \$35.97 \$35.29 \$64.88 \$45.15 \$36.92 \$40.96 \$69.49 \$46.51 \$23.12 \$24.05 \$28.31 \$28.66 \$1.69 \$1.36 \$1.08 \$1.43 **Innection of a touch-tone line assuming that the drop line same short of the same	2.014,154 \$2,381,575 \$3,202,321 \$2,491,491 \$1,753,190 \$3,279,189 \$3,808,131 \$4,213,853 \$3,372,507 \$3,863,916 \$8,937,551 \$9,287,450 \$11,003,989 \$10,466,059 \$7,407,162 \$493,630 \$666,126 \$1,125,714 \$524,762 \$587,184 \$192,151 \$128,912 \$178,576 \$200,963 (\$98,651) \$835,293 \$1,822,598 \$1,288,538 \$790,539 \$284,476 0,458,625 \$11,905,086 \$13,596,817 \$11,982,323 \$8,180,171 \$85.5% 78.0% 80.9% 87.3% 90.6% 6,657,238 \$29,788,112 \$39,444,549 \$30,060,497 \$24,965,974 \$5,863,674 \$18,998,012 \$23,105,268 \$17,309,135 \$14,991,604 \$14.74 \$17.69 \$19.13 \$17.84 \$21.13 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$21.28 \$20.68 \$23.02 \$30.62 \$15.32 \$4.16 \$4.78 \$7.81 \$6.90 \$4.06 \$14.74 \$17.69 \$19.13 \$17.84 \$21.13 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$28.45 \$33.57 \$34.53 \$42.05 \$42.76 \$27.52 \$35.97 \$35.29 \$64.88 \$45.15 \$28.45 \$36.92 \$40.96 \$69.49 \$46.51 \$28.45 \$36.92 \$40.96 \$69.49 \$46.51 \$28.45 \$36.92 \$40.96 \$69.49 \$46.51 \$28.45 \$36.93 \$40.96 \$69.49 \$46.51 \$28.45 \$36.93 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$54.32 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$60.87 \$10.339 \$60.46 \$34.11 \$60.00 \$34.03 \$40.37 \$43.73 \$40.339 \$60.46 \$34.41 \$30.00 \$34.03 \$40.37 \$43.73 \$43.73 \$43.73 \$60.46 \$34.41 \$40.00 \$34	2.014.154 \$2.381,575 \$3.202,321 \$2.491,491 \$1,753,190 \$2.206,496 \$3,279,189 \$3,808,131 \$4,213,853 \$3,372,507 \$3,863,916 \$3,030,965 \$8,937,551 \$9,287,450 \$11,003,989 \$10,466,059 \$7,407,162 \$7,269,241 \$493,630 \$666,126 \$1,125,714 \$524,762 \$587,184 \$413,581 \$192,151 \$128,912 \$178,576 \$200,963 (\$98,651) \$79,070 \$835,293 \$1.822,598 \$1,288,538 \$790,539 \$284,476 \$593,180 0,458,625 \$11,905,086 \$13,596,817 \$11,982,323 \$8,180,171 \$8,355,072 \$85,723 \$29,788,112 \$39,444,549 \$30,060,497 \$24,965,974 \$25,876,242 \$5,863,674 \$18,998,012 \$23,105,268 \$17,309,135 \$14,991,604 \$15,204,554 \$14,74 \$17.69 \$19,13 \$17.84 \$21.13 \$19.52 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$46.82 \$15.91 \$17.75 \$17.57 \$21.71 \$11.63 \$14.19 \$33.57 \$34.53 \$42.05 \$42.76 \$27.52 \$30.22 \$30.69 \$40.65 \$5.48 \$14.74 \$17.69 \$19.13 \$17.84 \$21.13 \$19.52 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$46.82 \$30.92 \$40.96 \$69.49 \$46.51 \$28.45 \$33.80 \$36.92 \$40.96 \$69.49 \$46.51 \$28.45 \$43.61 \$28.45 \$40.95 \$10.88 \$34.20 \$40.96 \$69.49 \$46.51 \$28.45 \$43.61 \$46.03 \$40.96 \$69.49 \$46.51 \$28.45 \$43.61 \$46.03 \$40.97 \$43.73 \$54.32 \$34.11 \$38.29 \$46.03 \$40.37 \$43.73 \$54.32 \$34.11 \$38.29 \$46.03 \$40.37 \$43.73 \$54.32 \$34.11 \$38.29 \$67.64 \$77.07 \$62.87 \$103.39 \$69.46 \$62.32	2.014.154 \$2.381.575 \$3.202.321 \$2.491.491 \$1.753.190 \$2.206.496 \$2.290.873 3.279.189 \$3.808.131 \$4.213.853 \$3.372.507 \$3.863.916 \$3.030.965 \$3.030.965 \$3.609.780 \$8.937.551 \$9.287.450 \$11,003.989 \$10.466,059 \$7,407.162 \$7,269.241 \$8.192.860 \$493.630 \$666.126 \$1.125.714 \$524.762 \$587.184 \$413.581 \$151.331 \$192.151 \$128.912 \$178.576 \$200.963 (\$98.651) \$79.070 \$7.529 \$835.293 \$1.822.598 \$1.288.538 \$790.539 \$284.476 \$593.180 \$539.092 0,458.625 \$11,905,086 \$13.596.817 \$11,982.323 \$8.180.171 \$8.355,072 \$8.890.812 \$8.556 \$78.0% \$80.9% \$87.3% \$90.6% \$87.0% \$92.1% \$6.657.238 \$29.788.112 \$39.444.549 \$30.060.497 \$24.965.974 \$25.876.242 \$27.278.783 \$5.863.674 \$18.998.012 \$23.105.268 \$17.309.135 \$14.991.604 \$15.204.554 \$17.221.014 \$8.416 \$4.78 \$7.81 \$6.90 \$4.06 \$5.48 \$4.02 \$14.74 \$17.69 \$19.13 \$17.84 \$21.13 \$19.52 \$21.98 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$46.82 \$49.90 \$\$\$ \$0.506 \$17.75 \$17.57 \$21.71 \$11.63 \$14.19 \$17.29 \$33.57 \$34.53 \$42.05 \$42.76 \$27.52 \$30.22 \$39.75 \$35.97 \$35.29 \$64.88 \$45.15 \$28.45 \$38.80 \$47.02 \$36.92 \$40.96 \$69.49 \$46.51 \$28.45 \$43.61 \$51.49 \$\$\$\$ \$11.69 \$13.6 \$1.08 \$14.33 \$0.00 \$0.62 \$0.40 \$	2.014.154 \$2.381.675 \$3.202.321 \$2.491.491 \$1.753.190 \$2.206.496 \$2.290.873 \$5.360.452 \$3.279,189 \$3.808,131 \$4.213.853 \$3.372.507 \$3.863.916 \$3.030.965 \$3.609,780 \$8.308.082 \$8.375.51 \$9.287.450 \$11,003.989 \$10,466.059 \$7,407.162 \$7,269.241 \$8.192.860 \$16.309.721 \$493.630 \$666,126 \$1.125,714 \$524,762 \$587,184 \$413.581 \$151,331 \$661.698 \$192.151 \$128.912 \$178.576 \$200.963 (\$98.651) \$79.070 \$7.529 \$252.273 \$252.273 \$1.822.598 \$1.288.538 \$790.553 \$284.476 \$533.180 \$539.092 \$2.335.307 \$0,458.625 \$11,905.086 \$13.596.817 \$11,982.323 \$8.180.171 \$8.355.072 \$8.890.812 \$19.558.999 \$8.5.5% \$78.0% \$80.9% \$87.3% \$90.6% \$87.0% \$92.1% \$83.4% \$6.657.238 \$29.788.112 \$39.444.549 \$30.060.497 \$24.965.974 \$25.876.242 \$27.278.783 \$54.710.347 \$5,863.674 \$18.998.012 \$23.3105.268 \$17,309.135 \$14.991.604 \$15.204.554 \$17.221.014 \$33.686.791 \$8.416 \$4.78 \$7.81 \$6.90 \$4.06 \$5.48 \$4.02 \$4.78 \$14.19 \$17.69 \$19.13 \$17.84 \$21.13 \$19.52 \$21.98 \$26.65 \$40.18 \$43.15 \$49.95 \$55.36 \$40.51 \$840.51 \$840.51 \$40.81

* Year end figures are provided in Table 2-10 of Statistics of Communications Common Carriers.

The year average levels for residential lines are the average of the year end 1993 and the 1994 statistics. Business lines were estimated the same way. In general, the RBOC's have approximately 10% of their business lines going to single-line businesses, with the other 90% going to multi-line businesses.

^{**} The Revenue and Plant data are summarized from the 1993/94 Statistics of Communications Common Carriers.

Table A5-3 Selected Data by Local Exchange Telephone Company - 1995

	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific Bell	SBC	U.S. West	Independents	Total
				age level of a					
Residential	12,001,777	12,391,420	14,431,574	7,750,485	9,769,199	9,354,984	10,233,615	20,401,937	96,334,990
Single-Line Business	804,437	410,618	554,775	539,875	583,188	330,639	413,419	2,208,624	5,845,574
Multi-Line Business	5,233,127	<u>6,062,423</u>	<u>5,098,281</u>	<u>4,627,566</u>	<u>4,998,831</u>	3,772,807	<u>3,543,647</u>	<u>4,815,757</u>	<u>38,152,437</u>
Total end user lines	18,039,340	18,864,461	20,084,629	12,917,926	15,351,219	13,458,429	14,190,681	27,426,318	140,333,002
Dania araa	¢4.076.000			lant reported			#2 206 606	¢6 450 005	¢24 000 002
Basic area	\$4,076,922	\$3,632,879	\$4,288,859	\$4,916,387	\$2,625,532			\$6,152,205	\$31,998,802
End user Primary Access Service (\$835,086	\$923,696 \$4,556,575	\$1,002,622 \$5,291,481	\$929,932 \$5,846,319	\$670,150 \$3,295,682	\$684,645 \$3,594,057	<u>\$724,154</u> \$4,120,760	\$1,294,568 \$7,446,773	\$7,064,853 \$39,063,655
, ,		φ 4 ,000,070	. , ,				φ 4 , 120,700	. , ,	Ф 39,003,033
Other local exchange (2)	\$1,000,602	\$1,115,728	\$1,842,909	\$1,311,015	\$796,255	\$967,021	\$809,142	\$1,522,702	\$9,365,374
Toll	\$1,261,240	\$1,325,405	\$840,540	\$848,127	\$1,213,080	\$739,707	\$1,179,780	\$2,395,082	\$9,802,961
Other Network Access	\$1,981,486	\$2,473,838	\$3,178,635	\$2,638,028	<u>\$1,745,198</u>	\$2,382,02 <u>3</u>	\$2,397,204	\$5,750,835	\$22,547,247
Toll Related (3)	\$3,242,726	\$3,799,243	\$4,019,175	\$3,486,155	\$2,958,278	\$3,121,730	\$3,576,984	\$8,145,917	\$32,350,208
Basic Network									
Revenues (1)+(2)+(3)	\$9,155,336		\$11,153,565	\$10,643,489	\$7,050,215	\$7,682,808		\$17,115,392	\$80,779,237
Other Local	\$523,802	\$704,729	\$1,284,552	\$503,917	\$407,066	\$425,900	\$145,625	\$768,270	\$4,763,861
Private Line and Other	£400.07E	£444 040	£400.050	£40 7 004	CO4 544	COO 440	£7.000	6040 400	COO 4 070
Toll	\$198,375	\$111,946 \$1.875,124	\$168,658 \$1,293,835	\$187,861	\$24,544 \$343.936	\$82,149	\$7,936	\$213,403	\$994,872 \$9,108,238
Miscellaneous & all other Total Operating Revenue				\$764,360	\$543,936 \$7,825,761	\$670,126 \$8,860,983	\$553,851 \$0,214,208	\$2,688,853 \$20,785,918	\$9,100,230 \$95,646,208
Total Operating Nevertue	φ10,795,000	\$12,103,343	\$13,900,010	\$12,099,021	\$1,023,101	φο,οου,θου	φ 3 ,214,230	φ20,765,916	φ95,040,200
Basic Network Revenue									
as % of Total Operating									
Revenue	84.8%	77.9%	80.2%	88.0%	90.1%	86.7%	92.3%	82.3%	84.5%
Total Plant In Service	\$28 010 281	\$32 802 250	\$43 280 629	\$32 836 522	\$26 653 383	\$27 973 360	\$30 774 017	\$61 877 838	\$284,208,280
Net Plant									\$157,309,822
				enues per a					
Primary Access Service	\$22.69	\$20.13	\$21.95	\$37.71	\$17.89	\$22.25	\$24.20	\$22.63	\$23.20
Other local exchange	\$4.62	\$4.93	\$7.65	\$8.46	\$4.32	\$5.99	\$4.75	\$4.63	\$5.56
Toll related	\$14.98	\$16.78	\$16.68 \$46.68	<u>\$22.49</u>	\$16.06	\$19.33 ***********************************		<u>\$24.75</u>	\$19.21 \$47.07
Basic Network Revenues	\$42.29	\$41.84	\$46.28	\$68.66	\$38.27	\$47.57	\$49.96	\$52.00	\$47.97
			Octobe	r 1995 Rate	Averages				
	Monthly ra	te for service i				eral Subscribe	er Line charge		
Residential	\$16.29	\$16.66	\$17.44	\$21.35	\$14.37	\$14.93	\$17.51	\$16.77	\$16.93
Single-Line Business	\$32.72	\$31.60	\$38.12	\$37.20	\$24.85	\$27.57	\$36.00	\$31.79	\$32.76
Multi-Line Business - Key		\$30.52	\$55.89	\$37.28	\$25.31	\$33.70	\$42.45	\$36.94	\$37.72
Multi-Line Business - PB		\$36.23	\$62.89	\$40.80	\$25.31	\$38.29	\$45.81	\$43.41	\$41.89
Weighted Averages									
For access line	\$22.38	\$22.36	\$28.66	\$28.35	\$18.33	\$21.15	\$24.70	\$22.09	\$23.81
Additional for touch-tone	\$0.77	\$1.40	\$0.98	\$0.88	\$0.00	\$0.33	\$0.23	\$0.62	\$0.66
C	Connection of	a touch-tone	line assuming	that the drop	line and conr	nection block i	is already pre	sent	
Residential	\$42.32		\$41.70	\$48.29	\$33.87	\$39.37	\$26.56	\$39.49	\$38.86
First Business Line	\$55.60	\$77.72	\$62.69	\$94.48	\$68.95	\$62.06	\$52.96	\$53.99	\$64.62
Additional Business Lines including hunting	\$39.57	\$62.94	\$36.85	\$66.27	\$98.19	\$48.97	\$65.23	\$42.54	\$55.33

* Year end figures are provided in Table 2-10 of Statistics of Communications Common Carriers.

The year average levels for residential lines are the average of the year end 1994 and the 1995 statistics. Business lines were estimated the same way. In general, the RBOC's have approximately 10% of their business lines going to single-line businesses,

with the other 90% going to multi-line businesses.

^{**} The Revenue and Plant data are summarized from the 1994/95 Statistics of Communications Common Carriers.

Appendix 6 Long Term Data Related to Telephone Service

	AT&T Rate			_	Base Rate		ated Fe	- 1
		ite Daytim			ra • • • •	Ex	cise Ta	xes
	on	January 1		Residential	Access Line FCC Urban			
		Mileage		AT&T	Rates Survey			
	5	200	2752	Jan 1	Oct 15	Local	Toll	Combined
1925								
1926								
1927								
1928	\$0.20	\$4.00	\$27.75					
1929	\$0.20	\$3.60	\$27.75					
1930	\$0.20	\$3.50	\$27.75					
1931	\$0.20	\$3.50	\$27.75					
1932	\$0.20	\$3.50	\$27.75					
1933	\$0.20	\$3.50	\$27.75				7.0%	2.1%
1934	\$0.20	\$3.50	\$27.75				7.0%	
1935	\$0.20	\$3.50	\$27.75				7.0%	
1936	\$0.20	\$3.50	\$27.75				7.0%	
1937	\$0.20	\$3.50	\$23.00				7.0%	l l
1938	\$0.20	\$2.55	\$23.00				7.0%	
1939	\$0.20	\$2.55	\$23.00				7.0%	- 1
1940	\$0.20	\$2.55	\$23.00	\$3.67			7.0%	
1941	\$0.20	\$2.55	\$13.10	\$3.67			8.2%	l l
1942	\$0.20	\$2.55	\$13.10	\$3.64		3.5%	11.7%	- 1
1943	\$0.20	\$2.20	\$11.00	\$3.64		7.7%	16.1%	
1944	\$0.20	\$2.20	\$11.00	\$3.66			24.7%	17.5%
1945	\$0.20	\$2.20	\$11.00	\$3.67			24.7%	17.5%
1946	\$0.20	\$2.20	\$6.70	\$3.67			24.7%	17.5%
1947	\$0.20	\$2.20	\$6.70	\$3.70			24.7%	17.5%
1948	\$0.20	\$2.20	\$6.70	\$3.91			24.7%	17.5%
1949	\$0.20	\$2.20	\$6.70	\$4.02			24.7%	17.5%
1950	\$0.20	\$2.20	\$6.70	\$4.29			24.7%	17.5%
1951	\$0.20	\$2.20	\$6.70	\$4.48			24.7%	17.5%
1952	\$0.20	\$2.20	\$6.70	\$4.62		12.7%	24.7%	17.5%
1953	\$0.25	\$2.20	\$6.70	\$4.93			24.7%	17.5%
1954	\$0.25	\$2.20	\$7.05	\$5.10		10.9%	16.7%	13.1%
1955	\$0.25	\$2.20	\$7.05	\$5.19		9.0%	10.0%	9.4%
1956	\$0.25	\$2.20	\$7.05	\$5.24		9.0%		9.4%
1957	\$0.25	\$2.20	\$7.05	\$5.28		9.0%		9.4%
1958	\$0.25	\$2.20	\$7.05	\$5.36		9.0%		9.4%
1959	\$0.25	\$2.20	\$7.05	\$5.51		9.0%	10.0%	9.4%
1960	\$0.25	\$2.20	\$6.45	\$5.55		9.0%	10.0%	9.4%
1961	\$0.25	\$2.20	\$6.45	\$5.61		9.0%	10.0%	9.4%

Appendix 6 Long Term Data Related to Telephone Service

	AT&T Rate	e for a Res	sidential	Average I	Base Rate	Estim	ated Fe	ederal
	10-minu	ite Daytim	e Call	fo	ra	Exc	cise Tax	kes
	on	January 1	l	Residential	Access Line			
					FCC Urban			
		Mileage		AT&T	Rates Survey			
	5	200	2752	Jan 1	Oct 15	Local	Toll	Combined
1962	\$0.25	\$2.20	\$6.45	\$5.62		9.0%	10.0%	9.4%
1963	\$0.25	\$2.20	\$6.45	\$5.65		9.0%	10.0%	9.4%
1964	\$0.45	\$2.20	\$6.45	\$5.66		9.0%	10.0%	9.4%
1965	\$0.45	\$2.20	\$6.45	\$5.67		9.0%	10.0%	9.4%
1966	\$0.45	\$2.20	\$5.50	\$5.64		9.0%	10.0%	9.5%
1967	\$0.45	\$2.20	\$5.50	\$5.60		9.0%	10.0%	9.5%
1968	\$0.50	\$2.20	\$4.90	\$5.61		9.0%	10.0%	9.5%
1969	\$0.50	\$2.20	\$4.85	\$5.68		9.0%	10.0%	9.5%
1970	\$0.50	\$2.15	\$4.55	\$5.76		9.0%	10.0%	9.5%
1971	\$0.50	\$2.10	\$4.50	\$6.04		9.0%	10.0%	9.5%
1972	\$0.52	\$2.34	\$4.50	\$6.38		9.0%	10.0%	9.5%
1973	\$0.52	\$2.34	\$4.50	\$6.69		8.1%	9.0%	8.5%
1974	\$0.52	\$2.48	\$4.67	\$7.08		7.2%	8.0%	7.6%
1975	\$0.52	\$2.48	\$4.67	\$7.32		6.3%	7.0%	6.6%
1976	\$0.70	\$3.15	\$4.16	\$7.81		5.4%	6.0%	5.7%
1977	\$0.91	\$3.25	\$3.96	\$8.07		4.5%	5.0%	4.8%
1978	\$1.00	\$3.34	\$3.96	\$8.31		3.6%	4.0%	3.8%
1979	\$1.00	\$3.34	\$3.96	\$8.40		2.7%	3.0%	2.9%
1980	\$1.00	\$3.34	\$3.96	\$8.61		1.8%	2.0%	1.9%
1981	\$1.01	\$3.54	\$4.17	\$9.16		1.8%	2.0%	1.9%
1982	\$1.13	\$4.07	\$4.80	\$10.18		0.9%	1.0%	1.0%
1983	\$1.76	\$4.09	\$5.15	\$11.38	\$10.50	2.7%	3.0%	2.9%
1984	\$1.76	\$4.09	\$5.15		\$12.10	2.7%	3.0%	2.9%
1985	\$1.65	\$3.87	\$4.83		\$13.18	2.7%	3.0%	2.9%
1986	\$1.75	\$3.14	\$3.79		\$14.62	2.7%	3.0%	2.9%
1987	\$1.58	\$2.67	\$3.28		\$15.10	2.7%	3.0%	2.9%
1988	\$1.47	\$2.45	\$2.88		\$14.99	2.7%	3.0%	2.9%
1989	\$1.47	\$2.34	\$2.75		\$15.83	2.7%	3.0%	2.9%
1990	\$1.71	\$2.15	\$2.50		\$15.94	2.7%	3.0%	2.9%
1991	\$1.71	\$2.10	\$2.49		\$16.66	2.7%	3.0%	2.9%
1992	\$1.70	\$2.10	\$2.45		\$16.67	2.7%	3.0%	2.9%
1993	\$2.00	\$2.20	\$2.50		\$16.77	2.7%	3.0%	2.9%
1994	\$2.20	\$2.40	\$2.50		\$16.83	2.7%	3.0%	2.9%
1995	\$2.40	\$2.70	\$2.80		\$17.16	2.7%	3.0%	2.9%
1996	\$2.50	\$2.80	\$3.00			2.7%	3.0%	2.9%
1997	\$2.60	\$2.90	\$3.10			2.7%	3.0%	2.9%

Appendix 6 Long Term Data Related to Telephone Service

	=	Consumer Price Indices	5		nal Consur expenditure (billions)	-
			Telephone		(/	
		Telephone	Service			Telephone as
	All Items	Service	Without FET	Total		a % of Total
1925	17.5					
1926	17.7					
1927	17.4					
1928	17.1					
1929	17.1	37.3	37.3	\$77.3	\$ \$0.6	0.78%
1930	16.7	37.5	37.5	\$69.9		0.86%
1931	15.2	37.6	37.6	\$60.5		0.99%
1932	13.7	37.7	37.7	\$48.6	\$0.5	1.03%
1933	13.0	37.5	36.8	\$45.8	\$0.4	0.87%
1934	13.4	37.0	36.2	\$51.4	\$0.4	0.78%
1935	13.7	36.8	36.0	\$55.8	\$0.5	0.90%
1936	13.9	36.6	35.8	\$62.0	\$0.5	0.81%
1937	14.4	36.1	35.3	\$66.7	\$0.5	0.75%
1938	14.1	36.1	35.3	\$64.1	\$0.5	0.78%
1939	13.9	36.1	35.3	\$67.0	\$0.6	0.90%
1940	14.0	36.1	35.3	\$71.0	\$0.6	0.85%
1941	14.7	36.3	35.4	\$80.8	\$0.7	0.87%
1942	16.3	38.3	36.0	\$88.6	\$0.8	0.90%
1943	17.3	39.5	35.6	\$99.5	\$1.0	1.01%
1944	17.6	40.7	34.6	\$108.2	\$1.1	1.02%
1945	18.0	41.3	35.1	\$119.6		1.00%
1946	19.5	41.3	35.1	\$143.9		0.83%
1947	22.3	42.0	35.7	\$161.9		0.86%
1948	24.1	44.1	37.5	\$174.9		0.91%
1949	23.8	46.0	39.1	\$178.3		0.95%
1950	24.1	49.7	42.3	\$192.1		0.99%
1951	26.0	50.6	43.1	\$208.1		1.06%
1952	26.5	52.5	44.7	\$219.1		1.10%
1953	26.7	54.3	46.2	\$232.6		1.16%
1954	26.9	53.4	47.2	\$239.8		1.17%
1955	26.8	52.9	48.4	\$257.9		1.20%
1956	27.2	53.5	48.9	\$270.6		1.22%
1957	28.1	54.5	49.8	\$285.3		1.26%
1958	28.9	56.1	51.3	\$294.6		1.32%
1959	29.1	57.4 59.3	52.5	\$318.1		1.32%
1960	29.6	58.3	53.3	\$332.4		1.36%
1961	29.9	58.5	53.5	\$342.6	\$4.8	1.41%

		Consumer		Persor	nal Consur	nntion
	=	Price Indices			xpenditure	-
		1100 11101000			(billions)	
			Telephone		(55)	
		Telephone	Service			Telephone as
	All Items	Service	Without FET	Total		a % of Total
1962	30.2	58.5	53.5	\$363.4	\$5.1	1.41%
1963	30.6	58.6	53.6	\$383.0	\$5.5	1.44%
1964	31.0	58.6	53.6	\$411.4	\$5.9	1.45%
1965	31.5	57.7	52.7	\$444.3	\$6.5	1.46%
1966	32.4	56.5	51.6	\$481.9		1.45%
1967	33.4	57.3	52.3	\$509.5	\$7.7	1.51%
1968	34.8	57.3	52.3	\$559.8	\$8.3	1.49%
1969	36.7	58.0	53.0	\$604.7	\$9.3	1.53%
1970	38.8	58.7	53.6	\$648.1	\$10.1	1.56%
1971	40.5	61.6	56.3	\$702.5	\$11.0	1.57%
1972	41.8	65.0	59.4	\$770.7	\$12.4	1.61%
1973	44.4	66.7	61.4	\$851.6	\$14.1	1.66%
1974	49.3	69.5	64.6	\$931.2	\$15.5	1.67%
1975	53.8	71.7	67.2	\$1,029.1	\$17.7	1.72%
1976	56.9	74.3	70.3	\$1,148.8	\$19.8	1.72%
1977	60.6	75.2	71.8	\$1,277.1	\$21.5	1.69%
1978	65.2	76.0	73.2	\$1,428.8	\$23.9	1.67%
1979	72.6	75.8	73.7	\$1,593.5	\$25.7	1.61%
1980	82.4	77.7	76.2	\$1,760.4	\$27.6	1.57%
1981	90.9	84.6	83.0	\$1,941.3	\$30.9	1.59%
1982	96.5	93.2	92.3	\$2,076.8	\$35.1	1.69%
1983	99.6	99.2	96.4	\$2,283.4	\$38.6	1.69%
1984	103.9	107.5	104.5	\$2,492.3	\$41.8	1.68%
1985	107.6	111.7	108.6	\$2,704.8	\$46.0	1.70%
1986	109.6	117.2	113.9	\$2,892.7	\$49.3	1.70%
1987	113.6	116.5	113.3	\$3,094.5	\$51.9	1.68%
1988	118.3	116.5	113.3	\$3,349.7	\$54.3	1.62%
1989	124.0	117.2	113.9	\$3,594.8	\$58.0	1.61%
1990	130.7	117.7	114.4	\$3,839.3	\$60.4	1.57%
1991	136.2	119.7	116.4	\$3,975.1	\$63.5	1.60%
1992	140.3	120.4	117.1	\$4,219.8	\$70.3	1.67%
1993	144.5	121.2	117.8	\$4,454.1	\$74.1	1.66%
1994	148.2	123.1	119.7	\$4,700.9	\$79.8	1.70%
1995	152.4	124.0	120.6	\$4,924.9	\$85.6	1.74%
1996	156.9	125.9	122.4	\$5,152.0	\$91.6	1.78%
1997						

	AT&T Chained Rate Index (Business and Residential)			Producer Price Indices 1972=100		
	Interstate &					
	Intrastate Internationa				Intrastate	Interstate
	Local	Toll	Toll	Local	Toll	Toll
1925						
1926						
1927						
1928						
1929						
1930						
1931						
1932						
1933						
1934						
1935						
1936						
1937						
1938						
1939						
1940	100.0	100.0	100.0			
1941	99.7	98.2	92.8			
1942	99.8	98.2	92.7			
1943	99.6	97.0	84.8			
1944	99.6	94.3	83.3			
1945	99.6	94.3	79.8			
1946	99.6	94.1	76.5			
1947	104.7	101.2	76.4			
1948	109.1	105.0	76.4			
1949	118.6	114.4	76.4			
1950	123.2	115.6	76.4			
1951	127.3	117.2	76.4			
1952	135.0	120.6	77.6			
1953	138.7	122.5	83.4			
1954	140.8	125.3	83.4			
1955	142.1	124.9	83.4			
1956	144.0	124.7	83.3			
1957	146.9	124.2	83.3			
1958	149.8	127.8	83.5			
1959	150.4	128.0	81.4			
1960	150.9	129.4	81.3			
1961	151.0	129.7	81.3			

Appendix 6 Long Term Data Related to Telephone Service

	AT&T Chained Rate Index			Producer Price Indices		
	(Business and Residential)			1972=100		
			Interstate &			
		Intrastate	Intersiale &		Intrastate	Interstate
	Local	Toll	Toll	Local	Toll	Toll
1962	151.2	124.9	81.3	Loodi	1011	1011
1963	151.2	124.5	80.3			
1964	150.9	123.6	80.3			
1965	150.2	119.7	77.9			
1966	149.7	117.8	77.9			
1967	149.5	116.6	75.7			
1968	151.3	116.3	76.2			
1969	152.3	117.4	76.3			
1970	159.1	123.2	74.0			
1971	167.8	136.8	76.1			
1972	176.2	137.7	76.4	100.0	100.0	100.0
1973	187.8	144.8	77.7	102.9	103.3	102.9
1974				108.8	107.7	103.0
1975				113.4	113.8	111.7
1976				118.9	125.6	118.9
1977				119.3	131.9	120.6
1978				122.1	132.0	121.9
1979				123.4	131.6	120.8
1980				128.0	132.3	124.7
1981				144.1	138.1	137.6
1982				160.6	145.6	152.0
1983				169.6	152.1	153.4
1984				182.4	157.1	148.9
1985				202.5	162.0	143.4
1986				223.6	158.0	133.0
1987				233.1	153.5	113.7
1988				236.6	149.3	110.2
1989				250.8	151.7	108.3
1990				253.4	146.3	107.8
1991				259.7	139.7	105.6
1992				260.8	140.8	107.4
1993				262.4	140.2	109.8
1994				264.4	139.2	117.2
1995						
1996						
1997						

		Linked Ser	ies	Other Economic Measures		
	1982 - 1984 = 100					
						GDP
				Toll Volume	Moody's	Billions of
		Intrastate	Interstate	Index	Aaa Bond	1992 Dollars
	Local	Toll	Toll	1925=100	Yields	(Chained)
1925				100	4.88%	\$848.7
1926				112	4.73%	\$899.4
1927				122	4.57%	\$897.9
1928				134	4.55%	\$906.7
1929				145	4.73%	\$963.6
1930				131	4.55%	\$873.9
1931				92	4.58%	\$798.6
1932				99	5.01%	\$691.5
1933				89	4.49%	\$677.0
1934				92	4.00%	\$728.8
1935				96	3.60%	\$787.9
1936				107	3.24%	\$899.3
1937				109	3.26%	\$808.4
1938				108	3.19%	\$902.0
1939				112	3.01%	\$973.1
1940	33.2	47.9	86.4	118	2.84%	\$1,049.6
1941	33.1	47.0	80.2	136	2.77%	\$1,235.0
1942	33.1	47.0	80.2	152	2.83%	\$1,467.0
1943	33.1	46.5	73.3	179	2.73%	\$1,733.1
1944	33.1	45.2	72.0	195	2.72%	\$1,874.8
1945	33.1	45.2	69.0	217	2.62%	\$1,839.8
1946	33.1	45.0	66.1	252	2.53%	\$1,489.6
1947	34.8	48.4	66.1	265	2.61%	\$1,448.6
1948	36.2	50.3	66.1	269	2.82%	\$1,505.6
1949	39.4	54.8	66.1	264	2.66%	\$1,506.0
1950	40.9	55.4	66.1	260	2.62%	\$1,634.6
1951	42.3	56.1	66.1	263	2.86%	\$1,803.7
1952	44.8	57.8	67.0	269	2.96%	\$1,874.0
1953	46.0	58.7	72.1	278	3.20%	\$1,949.1
1954	46.8	60.0	72.1	291	2.90%	\$1,923.2
1955	47.2	59.8	72.1	323	3.06%	\$2,030.1
1956	47.8	59.7	72.0	356	3.36%	\$2,071.7
1957	48.8	59.5	72.0	385	3.89%	\$2,106.4
4050	40.0	04.0			0.700/	00.000.4

72.2

70.4

70.2

70.2

411

450

484

512

3.79%

4.38%

4.41%

4.35%

\$2,090.4

\$2,212.3

\$2,261.7 \$2,309.8

1958

1959

1960

1961

49.8

50.0

50.1

50.2

61.2

61.3

62.0

62.1

Appendix 6 Long Term Data Related to Telephone Service

	Linked Series			Other Economic Measures		
	1982 - 1984 = 100					GDP
				Toll Volume	Moody's	Billions of
		Intrastate	Interstate	Index	Aaa Bond	1992 Dollars
	Local	Toll	Toll	1925=100	Yields	(Chained)
1962	50.2	59.8	70.2	556	4.33%	\$2,449.1
1963	50.2	59.6	69.4	595	4.26%	\$2,554.0
1964	50.1	59.2	69.4	652	4.40%	\$2,702.9
1965	49.9	57.3	67.3	727	4.49%	\$2,874.8
1966	49.7	56.4	67.3	817	5.13%	\$3,060.2
1967	49.6	55.9	65.4	899	5.51%	\$3,140.2
1968	50.2	55.7	65.9	1,014	6.18%	\$3,288.6
1969	50.6	56.2	66.0	1,177	7.03%	\$3,388.0
1970	52.8	59.0	63.9	1,304	8.04%	\$3,388.2
1971	55.7	65.5	65.8	1,372	7.39%	\$3,500.1
1972	58.5	66.0	66.0	1,520	7.21%	\$3,690.3
1973	60.2	68.2	68.0	1,639	7.44%	\$3,902.3
1974	63.7	71.0	68.0	1,762	8.57%	\$3,888.2
1975	66.3	75.0	73.8	2,199	8.83%	\$3,865.1
1976	69.6	82.8	78.6	2,506	8.43%	\$4,081.1
1977	69.8	87.0	79.6	2,837	8.02%	\$4,279.3
1978	71.5	87.1	80.5	3,266	8.73%	\$4,493.7
1979	72.2	86.8	79.8	3,664	9.63%	\$4,624.0
1980	74.9	87.3	82.3	3,891	11.94%	\$4,611.9
1981	84.3	91.1	90.8	4,189	14.17%	\$4,724.9
1982	94.0	96.1	100.4	4,430	13.79%	\$4,623.6
1983	99.3	100.3	101.3	4,757	12.04%	\$4,810.0
1984	106.8	103.6	98.3	5,765	12.71%	\$5,138.2
1985	118.5	106.9	94.7	6,702	11.37%	\$5,329.5
1986	130.8	104.2	87.9	7,199	9.02%	\$5,489.9
1987	136.4	101.3	75.1	7,781	9.38%	\$5,648.4
1988	138.5	98.5	72.8	8,378	9.71%	\$5,862.9
1989	146.8	100.1	71.5	8,946	9.26%	\$6,060.4 \$6,139.7
1990	148.3	96.5	71.2	9,301	9.32%	\$6,138.7
1991	152.0	92.2	69.7	9,542	8.77% 8.14%	\$6,079.0 \$6,244.4
1992 1993	152.6 153.6	92.9 92.5	70.9 72.5	10,011		\$6,244.4 \$6,386.4
1993	154.7	92.5 91.8	72.5 77.4	10,295 10,721	7.22% 7.97%	\$6,386.4 \$6,608.7
1994	134.7	91.8	11.4	10,721	7.97% 7.59%	\$6,742.9
1995					7.59%	\$7,008.7
1996						φ1,000.7
1997						

APPENDIX 7

Technical Notes on Telephone Service Price Indices

A. Introduction to CPI Price Indices

The Consumer Price Index (CPI) is the nation's most widely recognized measure of retail price changes. Initially termed a cost of living index, the CPI was first published for 1913 through 1919 to help set the wage levels of workers in shipyards. The CPI is now published monthly by the U.S. Department of Labor Bureau of Labor Statistics (BLS), and measures the prices all urban consumers pay for most goods and services. This index is also referred to as the CPI-U, to distinguish it from a related series that covers prices paid by wage earners and clerical workers. BLS defines urban areas as Metropolitan Statistical Areas (MSAs) and small cities with populations greater than 2500. About 80 percent of the American population live in urban areas. Aside from government provided services, the CPI survey covers all of the principle goods and services purchased by consumers for everyday living.

The BLS publishes a CPI index for local telephone service, interstate toll service, and intrastate toll service. These indices are combined into an index for all telephone services used by consumers. Telephone service price changes are also included in the CPI all items index, as well as in other broad indices. Based on sample weight, telephone prices account for roughly 2% of the CPI for all items.

The CPI is representative of national price changes, both urban and rural, for many purposes. This is true for the CPI indices covering telephone service prices. Telephone toll service charges are based on distance and time of day, and are not different in rural areas. Local rates may be different in rural areas than in the cities and small towns covered by the CPI. However, rural rates often change by almost the same percentage as do rates in cities and small towns. Thus, the telephone series would not be very different if it covered rural consumers in addition to urban consumers. The index is not, however, intended to represent the change in costs to businesses. While businesses often pay toll charges from the same tariff schedules that apply to residential traffic, businesses pay different charges for local services, and use many services not covered by the CPI.

The BLS constructs the CPI by collecting a sample of prices for a "market basket" of specific goods and services. Prices are collected in 85 urban areas. Prices are collected from about 60,000 housing units and from approximately 21,000 retail establishments -- department stores, supermarkets, hospitals, filling stations, and other providers of retail goods and services. Each month, the BLS reprices essentially the same market basket of goods using prevailing prices. The indices represent the ratio of current prices to base period prices. The BLS sample includes thousands of items grouped into several hundred product or service indices. The percentage changes for service and product indices are combined into broader indices. For example, one

grouping consists of all services and another consists of all commodities. Indices are also grouped into seven major cost categories: food and beverages, housing, apparel and upkeep, transportation, medical care, entertainment, and other goods and services. The telephone service index is classified with fuel and other utilities, which is a subcategory within housing.

The BLS prepares and releases CPI data about 16 days after the end of the month being reported. Subscribers can receive selected data by mailgram and a detailed report is published somewhat later. See for example, U.S. Department of Labor, Bureau of Labor Statistics, CPI Detailed Report for January 1995 released February, 1995.

The BLS has published monthly values of the CPI for all items starting in January, 1913. The BLS has published an average annual telephone price index since 1935. This index is based on the prices of both local and toll services. The BLS began publishing quarterly data on telephone prices in 1945, although first and third quarter estimates are unavailable for 1964 and 1965. The BLS has published a monthly index of telephone service prices since January 1969. The BLS began publishing monthly indices of local service, interstate toll, and intrastate toll rates in January 1978, following the 1977 CPI revision of the CPI.

The BLS continues to publish annual averages for telephone price indices. At one time, these annual figures were an average of the monthly rates for January of the year through January of the following year, with the two January values each having half the weight of other months. Since 1977, the annual averages are the simple average of monthly index values for the calendar year. Annual averages are useful for comparisons with expenditure, revenue, and expense data, because these data are usually available for calendar years. Monthly data are useful for comparing changes in prices between two points in time. For example, the percentage change in index levels between December of one year and December of the next year is a good indicator of the aggregate change in rates during the year.

B. The CPI Telephone Service Samples

The current local service sample consists of about 500 price quotes. Several price quotes are obtained in each of the sample areas. The quotes are not identical from city-to-city, and the BLS does not attempt to calculate a basic access service rate or installation charge on a city by city basis. Each of the price quotes represents a customer bill, and includes the same services that a real customer might take.

The current sample of local services quotes was selected from two clusters -- main station charges and telephone equipment leases. About 95% of the quotes are for main station service, which would be some form of local access service. The quotes are representative of typical customer bills. Thus, if roughly three quarters of households took touch-tone service, then about three quarters of the quotes would be for an access

line with touch-tone capability. Most quotes are for private line service with unlimited calling, but some quotes are for party line service and some are for measured or message calling. Individual price quotes might include an inside wiring maintenance plan, special features such as call waiting or speed dialing, installation charges, maintenance charges, charges for verification of a busy line, directory assistance charges, or even for a second access line. The quote would include message unit charges if the quote is for a measured or message rate access line. FCC and state subscriber line charges are considered to be part of the main station charge. Therefore, the local service index covers changes in federal subscriber line charges, even though these are interstate charges. The price quotes include all taxes and surcharges that apply to local charges.

The second local service cluster, less than 5% of quotes, represents the cost of leasing a telephone. Telephone sets were once known as "Main Stations" and are now generally referred to as "Customer Premises Equipment" (CPE). Main station telephone service included a primary instrument through the 1970s. CPE was detariffed in the early 1980s, and is now provided on a non-regulated, competitive basis. Prior to the 1987 revision, the cost of a primary instrument was included as part of all local exchange service quotes. Most consumers, however, no longer lease telephones and CPE is no longer considered part of local telephone service. The BLS reduced the weight afforded CPE as part of its 1987 revision. Some households in areas served by Bell Operating companies lease equipment from AT&T. Subscribers in other areas may lease equipment from the local telephone company, or from affiliates of the local telephone company. These lease rates are used for the CPE guotes in the local service sample.

Most consumers purchase and install their own CPE. The BLS now includes telephone sets with other consumer durable equipment. The term durable refers to items that are not typically consumed within 12 months. The BLS does not expect to publish separate CPE price indices in the near future, but includes CPE prices in calculating changes for the CPI index of all consumer durables. CPE purchases are not covered by the local telephone service price index.

The CPI local service index does not cover some services that are used by consumers. Local coin telephone service has been excluded because it represents a small percentage of consumer expenditures. Cellular service and subsidized service plans, such as lifeline and Link-Up rates, were not prevalent in the base period, and therefore were not included in the sample. These services could be covered in the future.

The sample of interstate and intrastate toll calls was drawn from larger toll call samples provided by telephone companies. Each call is specified by point of origination, point of destination, day of week, time of day, length of call, and type of call (Direct dialed, collect, placed by the operator, etc). Some quotes are for credit card calls and other types of operator assisted calls. Interexchange carriers (IXCs) other than AT&T have been included in the sample since 1987. New quotes are "linked" or "chained" into the index, so that the index did not change when IXCs other than AT&T were included. At one time other IXCs offered rates that were significantly lower than AT&T's toll rates.

Today, the basic schedule rates are similar for the larger carriers. However, customers with large toll bills can obtain significant discounts. Prior to 1994, these discounts were not included in the index, however, in 1994 the BLS began to incorporate some discounts into the interstate toll index. Between 20% and 30% of the quotes reflect a discount.

Intrastate toll includes all residential toll calls within a state. The intrastate toll samples consist of about 570 quotes from AT&T, other IXCs, and from local exchange carriers, who provide substantial amounts of intrastate toll service. No calling discounts are reflected in this index.

The interstate toll sample consists of about 600 quotes from AT&T and other IXCs. Interstate toll includes all calls made within the fifty states, and excludes international services, as well as calls between the mainland and Puerto Rico, Guam, or the Virgin Islands. Interstate toll service includes calls between Alaska and the mainland, and Hawaii and the mainland. Prior to 1982, calls to Alaska and Hawaii were governed by different tariffs than calls between the forty-eight mainland states. The interstate toll index fell in early 1979 when these rates declined. Rates for calls between Alaska, Hawaii, and the Mainland were reduced when the tariffs were integrated in 1982.

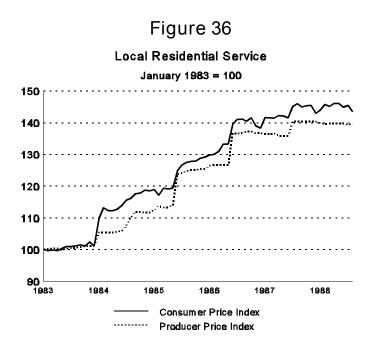
Alaska and Hawaii tariff rates are probably under represented in the CPI because Anchorage and Honolulu -- the areas sampled in these states -- are included in the CPI sample as "self representing" cities. Samples drawn from self representing cities are weighted by the population of the city. Other cities, by contrast, were sampled from groups of cities in the same region of the country, grouped by size. The cities sampled are given relatively greater weight so that they represent all of the weight for the group. Consequently, local and toll service rates from mainland cities are, in effect, used to represent urban areas in Alaska and Hawaii outside of Anchorage and Honolulu. There are significant differences between telephone services in Alaska and Hawaii compared with the mainland. For example, most interstate calls from Alaska and Hawaii are billed in the longest mileage bands, where prices have declined the most over time. Understating this traffic, however, does not significantly bias the interstate toll index because the populations outside of Anchorage and Honolulu are relatively small.

C. Other Features of CPI Telephone Indices

The BLS determines the changes in telephone prices each month by repricing the same sample of local services and toll calls. BLS field representatives determine the exact amount that a consumer would be charged for the specific services in the sample, including any charge that would appear on a normal bill for that service. Therefore, the indices cover taxes and surcharges. Appendix 6 shows estimates of the average federal excise tax rates over time, and the effect that changes in taxes have had on the CPI index for telephone service.

The change in index values from one month to the next may be a poor measure of a particular rate change or pricing trend. The BLS divides each month into three pricing periods -- early, middle, and late. The BLS prices about a third of the quotes in each pricing period. Thus, one particular quote will always be priced in the second week of the month, while another quote will always be priced at the end of the month. One consequence of this procedure is that a nationwide change in toll rates could appear as a price change in consecutive months. This was more pronounced before 1987, when prices for some quotes were obtained every second month.

Prices for local services are also obtained in all sample areas each month. As with toll prices, the use of three sample periods within the month makes some changes in local rates overlap months. This is more complicated for recurring local charges because local exchange companies send bills to customers throughout the month on fixed schedules. Many local exchange companies prorate changes in recurring rates from the date the tariff takes effect to the bill date. The prorated portion may appear on the bill in the month the tariff takes effect, or may be added to the following month's bill. Thus, the prorating process may either understate or overstate the rate change in the first month it appears on the bill.



Prior to the 1987 revision, the BLS collected local and intrastate toll rates in many sample areas in alternate months. This also delayed the appearance of rate changes in the monthly index series. In sum, there are several reasons why a single rate change may appear in CPI indices in two or more months. Figure 36 shows monthly values of the CPI local service index, and the PPI residential service index for January 1983 through January 1988, the period during which the FCC phased in the subscriber line charges.

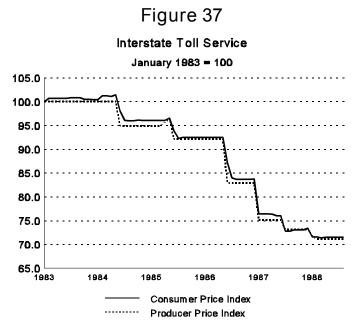


Figure 37 shows CPI and PPI series for Interstate toll service for the same months. All series have been rebased so that the December 1977 index levels equal 100. The largest index changes are associated with divestiture, and federal access charge policies. The PPI series show sharp changes, while the CPI series tend to show changes in more than one month. Thus, comparing CPI index levels in consecutive months is an unreliable means of estimating the magnitude of a specific rate change.

The BLS attempts to use actual prices paid in the current period to determine the CPI. Consequently, the

BLS does not revise already published CPI indices to reflect paid amounts being returned to consumers. Instead, refunds reduce the price paid in the months they are credited to consumer's bills. The price index drops the month a refund appears on the bill, and then rises the month after the refund is completed. For example, the local service index dropped by about 2% in July 1990, and rose a similar amount the following month. These changes appear to be associated with a rate refund in Wisconsin in July.

The CPI would not reflect direct government subsidies to ratepayers, or payments to carriers on behalf of ratepayers. The CPI does, however, reflect actual tariffed prices for generally available services even if a commission has ordered rates that are below cost. Thus, the form of a subsidy may affect its impact, or lack of impact, on the price indices.

Changes in local service area boundaries can have a significant impact on customer bills. Local exchange carriers frequently increase the local calling area for an exchange, increase the price of exchange service in part or all of the exchange, and drop the toll charge for calls that used to be between exchanges, but are now local to the exchange. On average, consumers may be paying exactly the same amount for service within the extended area (e.g., the increase in the local rate may be exactly offset by the drop in toll revenues). In such a case the BLS attempts to "link" or "chain" the series so that there is no change in either the local or intrastate toll indices. If total revenue is expected to increase as a result of the boundary change, then the local service index will rise. If total revenue is expected to fall, then the local service index might fall, even though local rates rose in the exchange.

The BLS does not routinely publish revised indices, but would do so if a correction would result in a 1% change in an entry level index for the total United States. (Some non

telephone indices are published by region or city and could be revised even if the nationwide price index would not change by 1%.) Corrections are generally included in the index in the month discovered. Corrections result from such factors as late filed data, carriers neglecting to include a rate change, and failures to associate changes in rates with change in service areas. Corrections are most obvious in the interstate toll index, since there are relatively few interstate rate changes. For example, the interstate toll index increased .8% in February 1984 as a result of a reporting error. The BLS has not revised the February index number.

The BLS publishes seasonally adjusted series for some CPI indices. Many price changes occur at the same time each year and are balanced or reversed by prices changed later in the year. For example, resort hotel rates increase dramatically "in season" and then fall "off season". These seasonal patterns may obscure analysis of short term trends. The BLS uses statistical tests to determine whether a price series shows seasonality, and to revise indices to remove the average seasonal change. These adjustments do not affect annual averages. Telephone prices do not fluctuate seasonally, and so the BLS does not create seasonally adjusted telephone indices.

D. The CPI Revision Process

The BLS revises the CPI sample cities and base weights at roughly 10 year intervals. The BLS has used these periodic revisions to introduce new statistical and sampling techniques, and to make major changes in definitions. For example, the BLS used the 1977 revision to introduce the local, intrastate toll and interstate toll indices. Prior to 1977, the BLS collected local rates in sample cities on a census basis rather than on a sample basis. In other words, they collected the same rate information in each city, and weighted the rates based on the actual number of subscribers. The BLS did not sample toll rates prior to 1977. Instead, AT&T provided estimates of the revenue effects of toll rate changes. The BLS then combined the local and toll data to create the telephone service index. The methodology described in the preceding sections was introduced in 1977.

BLS used the 1987 revision to reselect the sample cities, and revise the weights. About 30 of the 85 urban areas were replaced in the 1987 revision, and area weights were adjusted using 1980 census data. This type of revision makes the CPI sample more consistent with current population patterns.

The BLS also used the 1987 revision to adopt the 1982 to 1984 base period, and to revise the relative weights of the local and toll indices. In constructing broad indices, the index for a good or service is weighted by the relative importance of that item to urban consumers. The weight represents the total expenditures on the item in the base period divided by the total expenditures on all items in the base period. Prior to the 1977 revision, local service received significantly more than half of the sample weight. In 1977,

BLS began using weights based on the 1972-73 consumer expenditure survey. At that time local service still accounted for more than half of residential revenues.

The 1987 weights reflected the continued growth in toll usage. The 1987 weights were based on consumers expenditure surveys for 1982 through 1984, and carrier revenue data, such as the residential revenue figures that were reported by Bell Operating Companies in the MR-4 reports. (MR-4 reports are monthly financial reports voluntarily filed with the FCC by the Bell Operating Companies. AT&T filed MR-4 reports through 1987. After 1987, most of the Bell companies stopped filing revenue breakdowns of residential verses business customers.)

The CPI telephone service weights have lagged actual changes in spending patterns, which means that the CPI for telephone service has under weighted the dramatic reductions in toll rates that have occurred since 1984. Nonetheless, telephone service spending patterns are relatively stable compared to many items covered by the CPI, and CPI telephone indices appear to be highly reliable.

The BLS also updates the CPI by rotating the sample of price quotes. For many goods and services, the BLS attempts to reselect the price quotes in one fifth of the urban areas each year. To do this, the BLS reselects the businesses from which prices will be obtained, and reselects the specific goods and services that will be priced. This procedure helps ensure that the BLS prices the goods and services that are actually being used by consumers. The BLS did not rotate the telephone service quotes between 1977 and 1987. The BLS started rotating the local service sample after the 1987 revision, and plans to begin rotating toll quotes in the near future. The rotation of the toll quotes has been delayed, in part, because of the complexity and volatility of toll discount plans.

Sample rotation allows the CPI to better reflect usage trends. Usage of optional services such as call waiting is growing at a faster rate than basic access service. New quotes are more likely to have call waiting as one of the price elements. AT&T's toll market share has declined significantly in the past few years. The number of AT&T quotes will probably be reduced when the toll sample is rotated.

E. Introduction to Producer Price Indices

The Producer Price Index (PPI) is a statistical series established by the BLS to measure changes in the prices charged by producers. The index was formerly known as the Wholesale Price Index, and was first published in 1902. The BLS now publishes overall indices by stage of processing -- finished goods, intermediate goods, and crude materials for further processing. The finished goods index is based on indices for finished consumer goods and capital equipment. The BLS also publishes PPI indices by industry and by commodity groups.

The PPI indices are used for a variety of purposes. For example, the finished goods index is an indicator of the level of inflation in the overall economy. Changes in the intermediate goods index often signal future changes in inflation. The index for crude material other than foods and energy tends to change when overall consumer demand changes, and can indicate future changes in the economy.

The PPI program tracks over 4000 commodity prices. Each commodity is a uniquely specified item or group of items that is produced in quantity, generally by more than one firm. The BLS determines the prices of these commodities by collecting more than 43,000 price quotes each month. The program is voluntary, and sampled firms are asked to supply the actual freight-on-board (f.o.b.) selling prices on a specific day, close to the midpoint of each month. The BLS tracks the prices of goods sold by one industry to another industry or sold to the public. Prices for commodities sold within each industry are excluded. The average price of the commodity is divided by the price of the same commodity in the base period to compute the index, which represents the percentage change in price since the base period.

The producer price index is based on net revenues to the producer. Accordingly, the PPI indices do not change in response to changes in taxes.

The price changes for individual commodities are combined into broader indices based on the relative value of shipments for each commodity. The BLS cannot sample the prices of all commodities. The weight associated with commodities that are not sampled is included with the sampled commodity that is most similar.

The PPI indices are published monthly in a document titled "Producer Price Indices", which is available by subscription from the Superintendent of Documents, U.S. Government Printing Office.

F. The Discontinued PPI Telephone Service Indices (1972 - June 1995)

The PPI program began to cover some services in the 1970s. PPI telephone industry indices are not included in the stage of processing indices, and comprise a separate table in the PPI publication. The following telephone indices were reported for 1972 through June 1995.

Industry Code	Description
4811-1	Local Service
-111	Residential
-112	Business
-113	Optional additional usage
-114	Coin telephone
4811-2	Toll Service
-211	Intrastate Message Telephone Service (MTS)
-212	Interstate MTS
-213	International MTS
-247	Wide Area Telephone Service (WATS) Interstate WATS Intrastate WATS
2411-911	Directory advertising

In June 1995, the BLS revamped and revised the PPI telecommunications indices. These figures were determined in a flash cut process without trying to relate the historical PPI figures to the new indices.

The BLS did not publish indices for some major segments of the telephone industry, including connection charges, private line service, centrex service, common control switching arrangements (CCSA), and toll discount plans such as AT&T's Megacom service. Since the services tracked are not necessarily representative of these other services, the BLS did not calculate an overall producer price index for telephone service. As of June 1995, the BLS completely revised its PPI for telephone services. They did not however determine the historically equivalent values, using the new weights and formulas, thus values prior to June 1995 are not comparable to those after this date.

Prior to June 1995, the BLS constructed the PPI telephone indices using base year industry data to specify a sample and weights. The MTS sample, for example included all time of day, day of week, and mileage bands pricing strata. As service categories changed over time, the BLS used the base year data to estimate how previous weights should be allocated or combined. Thus, if three mileage bands were combined into two bands, base year data would be used to determine how much weight each of the new mileage bands would have had if they had existed in the base year.

The PPI included four local service categories: residential service recurring charges, business service recurring charges, charges for measured or message rate calls by business and residence customers, and coin service. The residence and business indices covered touch-tone charges and subscriber line charges, but excluded customer premises equipment (CPE) and inside wiring maintenance plan revenues. At one time local service charges covered these items. Charges for these items were chained out of the local indices once the charges for these items became unbundled from the recurring service charges. The indices did not cover newer service features such as call waiting.

Coin service included the charges for local calls made from public and semi-public telephones owned by the local exchange company. Local exchange companies had a monopoly on pay telephone service during the base period. Therefore, the PPI coin sample did not cover pay telephone charges for independently owned pay telephones. The index did cover payments or guarantees associated with semi-public telephones. Semi-public telephones are owned by local exchange companies but located on private property, such as inside a store or hotel. The owner of the property might make guarantees on the minimum level of traffic, or might be paid if telephones generate more than a specified level of traffic. The coin index was based on the carrier's net revenue associated with providing local pay telephone service, not just the per call charge to the consumer.

The sample for the residence, business and optional additional usage indices consisted of 19 companies. The sample of coin service consisted of 9 companies. For this purpose, a company was considered to be all of a local exchange company's operations within a state. The same carrier's operations within a different state were considered to be a different company. The BLS attempted to base the local indices on a census of rates, rather than a sample. Virtually all company billings were tabulated in the service period so that accurate weights could be assigned to each type of service. For example, basic service rates generally vary depending on the number of telephones in each exchange. The BLS collected basic rates for each class of exchanges, and weighted the prices by corresponding revenues in the base period.

The toll service samples were based on usage patterns from the mid 1970s. The intrastate MTS series was based on a sample of 12 companies. Again, a company is considered to be all of a carrier's operations in one state. AT&T provided virtually all intrastate toll service in the 1970s, when the BLS selected the sample. With divestiture,

the sample was presumably divided between AT&T and the Regional Bell Operating Companies, which both provide intrastate toll service.

The interstate MTS index covered all calls between the 50 states, including calls to and from Alaska and Hawaii. However, the sample did not cover competing interexchange carriers, such as MCI. MCI filed its first metered service tariff on September 10, 1974, which was after the 1972 base period. Including other carriers would not have resulted in significant differences in the MTS indices.

The international MTS index covered calls between the 50 states and other points in the world. For this purpose, Puerto Rico is considered to be a foreign point. The international MTS sample consisted of traffic between the United States and 10 countries. Price changes were based on net revenue received by the U.S. carrier and not rates paid by customers. International calls are handled by both a U.S. carrier and a foreign carrier. When the U.S. carrier bills the customer, the foreign carrier is compensated based on international settlement agreements. Similarly, when a foreign carrier bills the customer, the U.S. carrier is compensated. Changes in the settlement agreements and international currency rates can significantly change the net revenue actually received by the U.S. carrier, even if rates to the customer remain the same. Of course, changes in tariff rates also affect the net revenue retained by the U.S. carrier.

The Wide Area Toll Service (WATS) index covered traditional WATS service as well as 800 service, which used to be called "IN-WATS". The sample design and weights were based on usage patterns from the mid 1970s, and did not cover newer services, such as the AT&T Megacom offering. WATS was primarily a discount MTS service in the 1970s. Today, 800 service is considerably larger than traditional WATS. Nonetheless, the weights continued to be based on the usage patterns of the 1970s. The intrastate WATS sample included 13 companies. As above, company refers to all of one carrier's operations within one state. The interstate WATS sample did not cover traffic to Hawaii, Alaska, Puerto Rico, or the Virgin Islands, since these areas were excluded from WATS service in the mid 1970s.

At one time the BLS published an interstate private line index, Series 4811-311. Rapid changes in service offerings quickly made this index an unreliable measure of private line rates.

The PPI telephone service indices covered prices charged by carriers to noncarrier customers. Thus, the private line index did not cover Comsat, which provided circuits to other carriers. Similarly, the indices did not cover the access services that the local exchange carriers provide to interexchange carriers. However, changes in access rates are sometimes accompanied by changes in local service or toll rates, which did appear in the indices.

The BLS policy is to revise PPI indices one month and then four months after the index is published. Most revisions result from late filed price reports and corrections by respondents. The BLS also revises indices to reflect refunds. State rate commissions often order telephone companies to refund amounts that ratepayers paid in the past. They often accomplish this by lowering the rates for some future period. From a regulated accounting standpoint, the carrier receives less revenue for the past period. Since the PPI indices measure revenue received by carriers, rather than rates paid by customers, the BLS revises the PPI index for the past period. The index will show no changes for the period during which carriers actually lower rates.

The BLS began planning a major revision of the PPI telephone indices in 1986. They completed the revision process in June 1995, with these figures based on new definitions, weights, and components. The revision allows the BLS to use weights that reflect current usage, and samples that reflect current service offerings. This revision was done with a flash cut process, with no historical values determined for the new series. Thus future PPI telephone service index values will not be comparable with those previously published, because of the different weights and service offerings included in the indices.

The principal difference between the CPI and the discontinued PPI telephone series is that the CPI measures changes in the cost of an item to consumers while the PPI measures changes in the revenue received by producers. The following chart details several specific differences.

CPI Telephone Indices	PPI Telephone Indices prior to June 1995
The all telephone service index is available from 1919 to the present. The local and toll indices are available from 1978.	The local and toll indices are available from 1972 to May 1995. There is no overall PPI for telephone service.
CPI weights are based on residential customer usage.	PPI weights are based on carrier revenues from all customers except other carriers.
The price samples consist of a selection of items as they might appear on a typical bill.	The sample consists of a census of rates weighted by base period usage. (This changed with the June 1995 revision.)
It may take two or three months for the full effect of a rate change to be reflected in an index. This was more pronounced before 1987.	The full effect of a rate change is usually reflected in an index in one month.
The samples are drawn from 85 urban areas.	The samples cover all of a company's operations in selected states. PPI indices cover rural rates

CPI Telephone Indices	PPI Telephone Indices prior to June 1995
Samples are based on usage patterns from the middle to late 1980s.	The samples are based on usage patterns from the early to middle 1970s.
The indices cover taxes and government surcharges.	The indices do not cover taxes or government surcharges.
Refunds reduce the indices the same month they appear on customer bills.	Refunds are attributed to periods when the service was actually provided. Past period index levels are revised to reflect the rates that should have been charged.
The local service index covers basic service charges, connection, and service features such as touch-tone, call waiting, and speed dialing. The local service index also covers residential message unit charges.	The local residential and local business indices cover basic service and touch-tone charges. Business and residence message unit charges are covered in a separate index.
The local service index does not cover local coin service charges.	Local coin service is covered in a local coin index.
The local service index covers leased equipment and inside wiring maintenance plans.	The local service indices stopped covering leased equipment and inside wiring maintenance when the charges were unbundled.
The interstate toll index does not cover international calls.	International calls are covered in a separate index.
The toll indices reflect some toll discount plans. Nonetheless, discounts appear to be under represented prior to 1997.	The toll indices do not reflect any toll discount plans.
The toll samples include calls carried by LECs, AT&T, and other interexchange carriers.	The toll samples probably cover calls carried by LECs and AT&T, but not by other interexchange carriers.

G. The Current PPI Telephone Service Indices (since June 1995)

The BLS introduced a revised series of price indices for telephone services in June of 1995. The number of indices has been expanded to 39, from the 13 which were previously measured. In addition to the finer product detail offered by the new indices, an overall telephone services index has been added. Future editions of the Reference Book will explore the PPI revisions in further detail.

		Total Industry	Purchases of	Communications	Communications
		Output	Communications	Purchases as	Purchases by
		(Millions)	Except Radio	Percent of Total	Industry as a
			& Television	Output	Percent of Tota
5	SIC industry group		(Millions)		Communications
					Purchases
1 L	ivestock and livestock products	\$87,484.3	\$221.5	0.25%	0.14
2 (Other agricultural products	\$86,742.0	\$246.2	0.28%	0.15
3 F	Forestry and fishery products	\$7,456.4	\$3.5	0.05%	0.00
4 <i>F</i>	Agricultural, forestry, and fishery services	\$22,200.6	\$0.5	0.00%	0.00
5 l	ron and ferroalloy ores mining	\$1,522.9	\$1.9	0.12%	0.00
6 1	Nonferrous metal ores mining	\$5,284.1	\$7.2	0.14%	0.00
7 (Coal mining	\$25,451.8	\$21.0	0.08%	0.01
8 (Crude petroleum and natural gas	\$84,228.3	\$120.1	0.14%	0.07
9 5	Stone and clay mining and quarrying	\$10,287.7	\$17.6	0.17%	0.01
	Chemical and fertilizer mineral mining	\$2,676.2		0.17%	0.00
	New construction	\$617,049.7	\$2,312.1	0.37%	1.43
12 F	Repair & maintenance construction	\$173,466.3	\$2.8		0.00
	Ordinance and accessories	\$31,437.8	\$144.5		0.09
	Food and kindred products	\$325,971.7	•	0.14%	0.28
	Tobacco manufactures	\$26,382.7	\$28.1	0.11%	0.02
	Broad and narrow fabrics, yarn and thread mills	\$38,244.0	\$47.9		0.03
	Miscellaneous textile goods and floor coverings	\$15,981.8	\$28.2		0.02
	Apparel	\$64,183.8	\$94.9		0.06
	Miscellaneous fabricated textile products	\$16,987.3	\$29.1	0.17%	0.02
	Lumber and wood products, except containers	\$72,327.1	\$124.0		0.08
	Vood containers	\$547.4	\$1.4	0.26%	0.00
	Household furniture	\$18,418.6	\$42.0	0.23%	0.03
	Other furniture and fixtures	\$18,358.3	\$46.8	0.25%	0.03
	Paper & allied products, except containers	\$81,982.3	\$152.1	0.19%	0.09
	Paperboard containers and boxes	\$25,510.8	\$72.0	0.28%	0.04
	Printing & publishing	\$137,104.4	\$446.9		0.28
	Chemicals and selected chemical products	\$97,886.9	\$246.7	0.25%	0.15
	Plastics and synthetic materials	\$40,672.4	\$90.9	0.22%	0.06
	Orugs, cleaning and toilet preparations	\$69,241.5	\$205.5		0.13
	Paints & allied products	\$12,072.4	\$40.1	0.33%	0.02
	Petroleum refining and related industries Rubber & miscellaneous plastics products	\$137,871.1 \$95,571.6	\$186.6		0.12 0.15
	·	\$85,571.6	\$248.6		0.13
	_eather tanning and finishing Footwear and other leather products	\$2,222.1 \$6,477.5	\$4.9 \$17.5	0.22% 0.27%	0.00
	Glass and glass products	\$16,085.3	\$17.5 \$122.3		0.01
	Stone and clay products	\$43,731.7	\$294.8	0.67%	0.08
	Primary iron and steel manufacturing	\$68,090.7	\$294.6 \$149.6		0.10
	Primary nonferrous metals manufacturing	\$56,376.3			0.09
	Metal containers	\$11,904.3	•		0.01
	Heating, plumbing, & fabricated structural metal products	\$43,930.4			0.07
	Screw machine products and stampings	\$31,973.5			0.05
	Other fabricated metal products	\$44,424.2			0.11
	Engines and turbines	\$14,095.6	•		0.02
	Farm and garden machinery	\$10,976.9	\$26.4		0.02
	Construction and mining machinery	\$15,776.5			0.02
	Materials handling machinery and equipment	\$7,193.9			0.02
	Metalworking machinery and equipment	\$21,226.8	\$85.5		0.02
	Special industrial machinery and equipment	\$21,220.8 \$16,253.8			0.05
	Seneral industrial machinery and equipment	\$23,235.9		0.43%	0.06

	Table A8-1	Economy			
	1987 Use of Communications Services by Sector of the I		Durahaaaa af	Communications	Communications
		Total Industry Output	Purchases of Communications	Communications Purchases as	Communications Purchases by
		(Millions)	Except Radio	Percent of Total	Industry as a
		(Willions)	& Television	Output	Percent of Total
	SIC industry group		(Millions)	Output	Communications
	c.o maddif group		(Willions)		Purchases
50	Miscellaneous machinery, except electrical	\$20,003.1	\$72.0	0.36%	0.04%
51	Office, computing, and accounting machines	\$55,819.5	\$792.2	1.42%	0.49%
52	Service industry machines	\$22,408.9	\$75.5	0.34%	0.05%
53	Electric industrial equipment and apparatus	\$22,665.3	\$126.0	0.56%	0.08%
54	Household appliances	\$16,360.5	\$35.8	0.22%	0.02%
55	Electric lighting and wiring equipment	\$17,614.8	\$65.2	0.37%	0.04%
56	Radio, TV, and communication equipment	\$40,699.5	\$159.0	0.39%	0.10%
57	Electronic components and accessories	\$48,653.6	\$186.8	0.38%	0.12%
58	Miscellaneous electrical machinery and supplies	\$20,823.0	\$81.5	0.39%	0.05%
59	Motor vehicles and equipment	\$203,105.4	\$468.5	0.23%	0.29%
60	Aircraft parts	\$82,127.6	\$359.0	0.44%	0.22%
61	Other transportation equipment	\$24,082.1	\$91.6	0.38%	0.06%
62	Scientific and controlling instruments	\$85,463.4	\$431.9	0.51%	0.27%
63	Optical, opthalmic and photographic equipment	\$19,725.4	\$42.0	0.21%	0.03%
64	Miscellaneous manufacturing	\$33,089.1	\$70.9	0.21%	0.04%
65	Transportation and warehousing	\$285,767.5	\$2,988.5	1.05%	1.85%
66	Communications, except radio and TV	\$161,126.8	\$33,184.2	20.60%	20.60%
67	Radio and television broadcasting	\$29,396.2	\$189.8	0.65%	0.12%
68	Private electric, gas, water and sanitary services	\$211,182.0	\$289.1	0.14%	0.18%
	Wholesale and retail trade	\$844,444.2		1.20%	6.30%
70	Finance and insurance	\$459,462.0	\$7,597.0	1.65%	4.71%
	Real estate and rental	\$805,418.9	\$1,539.2	0.19%	0.96%
	Hotels; personal and repair service (exc. auto)	\$107,299.8	\$1,568.2	1.46%	0.97%
73	Business and professional services except medicinal	\$475,363.9	\$7,387.2	1.55%	4.58%
74	Eating and drinking places	\$209,394.0	\$803.6	0.38%	0.50%
	Automobile repair and services	\$130,704.0	\$1,020.6	0.78%	0.63%
	Amusements	\$78,192.4	\$657.6	0.84%	0.41%
	Health, educational, and social services and nonprofit organizations	\$491,189.3	\$4,535.6	0.92%	2.81%
	Federal government enterprises	\$45,396.3	\$146.2	0.32%	0.09%
79	State and local government enterprises	\$69,483.9	\$233.6	0.34%	0.14%
	Total business output	\$7,991,042.0			
	Total communications sales as factor inputs		\$82,523.0	1.03%	51.22%
	Personal consumption expenditures	\$3,072,252.0	\$61,962.7	2.02%	38.46%
	Gross private fixed investment fixed investment	\$732,891.3	\$4,388.9	0.60%	2.72%
	Change in business inventories	\$28,037.4			
	Exports	\$348,572.0	\$2,496.2		
	Imports	(\$490,442.0))		
	Federal government purchases	\$384,927.0	\$3,853.2	1.00%	2.39%
	State and local government purchases	\$549,284.0	\$4,796.0	0.87%	2.98%
	Gross Domestic Product (GDP)	\$4,625,521.7	\$77,940.0	1.68%	48.37%
	Total Commodity Output	\$7,716,018.0	\$161,127.0	2.09%	100.00%
	ι σται συπιπουίτη συτρατ	φι,ι 10,016.0	φ101,127.0	2.09%	100.00%

Source: Annual Input-Output Accounts of the U.S. Economy, 1987 Benchmark. Table 2 - The Use of Commodities, Disks, published April, 1994. The 1987 estimates are based on relationships in the economy found in the 1982 benchmark Census of manufacturers.

		Total Industry	Sales to	Percentage of	Sales to
	SIC industry group	Output (Millions)	Communications Except Radio & Television (Millions)	Total Sales to Communications Except Radio & Television	Communications Except Radio & TV as percent of Communications Total Revenue
1	Livestock and livestock products	\$87,484.3		0.00%	0.00%
2	Other agricultural products	\$86,742.0		0.00%	0.00%
3	Forestry and fishery products	\$7,456.4		0.00%	0.00%
4	Agricultural, forestry, and fishery services	\$22,200.6	\$3.6	0.02%	0.00%
5	Iron and ferroalloy ores mining	\$1,522.9		0.00%	0.00%
6	Nonferrous metal ores mining	\$5,284.1		0.00%	0.00%
7	Coal mining	\$25,451.8		0.00%	0.00%
8	Crude petroleum and natural gas	\$84,228.3		0.00%	0.00%
9	Stone and clay mining and quarrying	\$10,287.7		0.00%	0.00%
10	Chemical and fertilizer mineral mining	\$2,676.2		0.00%	0.00%
11	New construction	\$617,049.7		0.00%	0.00%
12	Repair & maintenance construction	\$173,466.3	\$6,678.0	3.85%	4.149
13	Ordinance and accessories	\$31,437.8	\$0.5	0.00%	0.00%
14	Food and kindred products	\$325,971.7	\$1.8	0.00%	0.00%
15	Tobacco manufactures	\$26,382.7		0.00%	0.00%
16	Broad and narrow fabrics, yarn and thread mills	\$38,244.0		0.00%	0.00%
17	Miscellaneous textile goods and floor coverings	\$15,981.8		0.00%	0.009
18	Apparel	\$64,183.8	\$73.0	0.11%	0.05%
19	Miscellaneous fabricated textile products	\$16,987.3	\$1.1	0.01%	0.00%
20	Lumber and wood products, except containers	\$72,327.1	****	0.00%	0.00%
21	Wood containers	\$547.4		0.00%	0.00%
	Household furniture	\$18,418.6		0.00%	0.00%
23	Other furniture and fixtures	\$18,358.3		0.00%	0.00%
24	Paper & allied products, except containers	\$81,982.3	\$79.5	0.10%	0.05%
	Paperboard containers and boxes	\$25,510.8	\$42.8	0.17%	0.03%
	Printing & publishing	\$137,104.4	\$706.9	0.52%	0.449
27	Chemicals and selected chemical products	\$97,886.9	\$93.3	0.10%	0.069
28	•		φ93.3	0.00%	0.00%
	Plastics and synthetic materials	\$40,672.4	¢£4.7		
29	Drugs, cleaning and toilet preparations	\$69,241.5	\$51.7	0.07%	0.039
	Paints & allied products	\$12,072.4	\$109.1	0.90%	0.079
31	Petroleum refining and related industries	\$137,871.1	\$117.4	0.09%	0.079
	Rubber & miscellaneous plastics products	\$85,571.6	\$393.8	0.46%	0.24%
33	Leather tanning and finishing	\$2,222.1	C4.0	0.00%	0.00%
34	Footwear and other leather products	\$6,477.5	\$4.8	0.07%	0.00%
	Glass and glass products	\$16,085.3	\$14.8	0.09%	0.019
36	Stone and clay products	\$43,731.7	\$0.9	0.00%	0.00%
37	Primary iron and steel manufacturing	\$68,090.7	\$0.8	0.00%	0.009
38	Primary nonferrous metals manufacturing	\$56,376.3	\$44.2	0.08%	0.03%
39	Metal containers	\$11,904.3		0.00%	0.00%
40	Heating, plumbing, & fabricated structural metal products	\$43,930.4		0.00%	0.009
41	Screw machine products and stampings	\$31,973.5	\$329.1	1.03%	0.20%
42	Other fabricated metal products	\$44,424.2	\$181.4	0.41%	0.119
43	Engines and turbines	\$14,095.6	\$242.1	1.72%	0.159
44	Farm and garden machinery	\$10,976.9		0.00%	0.009
45	Construction and mining machinery	\$15,776.5		0.00%	0.009
46	Materials handling machinery and equipment	\$7,193.9		0.00%	0.009
47	Metalworking machinery and equipment	\$21,226.8	\$3.6	0.02%	0.009
48	Special industrial machinery and equipment	\$16,253.8		0.00%	0.00

	Table A8-2	ana laduatar			
	1987 Use of Products and Services by the Communication	ons industry Total Industry	Sales to	Percentage of	Sales to
		Output	Communications	Total Sales to	Communications
		(Millions)	Except Radio	Communications	Except Radio & TV
		(IVIIIIOI15)	& Television	Except Radio	as percent of
			(Millions)	& Television	Communications
	SIC industry group		(IVIIIIIOTIS)	α relevision	Total Revenue
	Sic industry group				Total Revenue
49	General industrial machinery and equipment	\$23,235.9	\$300.5	1.29%	0.19%
50	Miscellaneous machinery, except electrical	\$20,003.1	\$6.6	0.03%	0.00%
51	Office, computing, and accounting machines	\$55,819.5	\$57.6	0.10%	0.04%
52	Service industry machines	\$22,408.9		0.00%	0.00%
53	Electric industrial equipment and apparatus	\$22,665.3	\$264.3	1.17%	0.16%
54	Household appliances	\$16,360.5	\$0.2	0.00%	0.00%
55	Electric lighting and wiring equipment	\$17,614.8	\$55.4	0.31%	0.03%
56	Radio, TV, and communication equipment	\$40,699.5	\$2,178.9	5.35%	1.35%
57	Electronic components and accessories	\$48,653.6	\$1,682.6	3.46%	1.04%
58	Miscellaneous electrical machinery and supplies	\$20,823.0	\$206.2	0.99%	0.13%
59	Motor vehicles and equipment	\$203,105.4	\$14.3	0.01%	0.01%
60	Aircraft parts	\$82,127.6		0.00%	0.00%
61	Other transportation equipment	\$24,082.1	\$14.4	0.06%	0.01%
62	Scientific and controlling instruments	\$85,463.4	\$9.4	0.01%	0.01%
63	Optical, opthalmic and photographic equipment	\$19,725.4	\$68.0	0.34%	0.04%
64	Miscellaneous manufacturing	\$33,089.1	\$93.6	0.28%	0.06%
65	Transportation and warehousing	\$285,767.5	\$464.7	0.16%	0.29%
66	Communications, except radio and TV	\$161,126.8	\$33,184.2	20.60%	20.60%
67	Radio and television broadcasting	\$29,396.2		0.00%	0.00%
68	Private electric, gas, water and sanitary services	\$211,182.0	\$1,638.4	0.78%	1.02%
69	Wholesale and retail trade	\$844,444.2	\$923.6	0.11%	0.57%
70	Finance and insurance	\$459,462.0	\$1,962.3	0.43%	1.22%
71	Real estate and rental	\$805,418.9	\$2,805.7	0.35%	1.74%
72	Hotels; personal and repair service (exc. auto)	\$107,299.8	\$483.5	0.45%	0.30%
73	Business and professional services except medicinal	\$475,363.9	\$4,591.9	0.97%	2.85%
74	Eating and drinking places	\$209,394.0	\$502.6	0.24%	0.31%
75	Automobile repair and services	\$130,704.0	\$523.0	0.40%	0.32%
	Amusements	\$78,192.4	\$698.5	0.89%	0.43%
77	Health, educational, and social services and nonprofit organizations	\$491,189.3	\$230.9	0.05%	0.14%
78	Federal government enterprises	\$45,396.3	\$250.5	0.55%	0.16%
79	State and local government enterprises	\$69,483.9	\$67.6	0.10%	0.04%
80	Noncomparable imports	, ,	\$3,758.0		
	Total Sales	\$7,991,042.0	\$66,211.6	0.83%	41.09%
	Value added	\$4,572,829.0	\$94,949.0	2.08%	58.93%

Source: Annual Input-Output Accounts of the U.S. Economy, 1987 Benchmark. Table 2 - The Use of Commodities, Disks, published April, 1994. The 1987 estimates are based on relationships in the economy found in the 1982 benchmark census of manufacturers.

Table A8-3 1987 Use of Communications Services by Sector of the Economy Detailed data for those industries with greater than 2% of Total Communications Purchases Total Industry Purchases of Communications Communications Output Communications Purchases as Purchases by (Millions) **Except Radio** % of Total Industry as a & Television Output % of Total (Millions) Communications SIC industry group Purchases 69 Wholesale and Retail Trade \$844,444.0 \$10,147.0 1.20% 6.30% 690100 Wholesale Trade \$423,750.7 \$5,572.9 1.32% 3.46% 690200 Retail Trade, exc. Eating and Drinking \$420,693.5 \$4,574.0 1.09% 2.84% 1.65% 70 Finance and Insurance \$459,462.0 \$7,597.0 4 71% 700100 Banking \$192,444.1 \$3,774.1 1.96% 2.34% 700200 Credit Agencies other than Banks \$33,018.2 \$715.2 2.17% 0.44% 700300 Security and commodity brokers \$61,150.2 \$702.9 1.15% 0.44% 700400 Insurance Carriers \$123,973.4 \$1,256.2 1.01% 0.78% 700500 Insurance agents, brokers, and services \$48,876.1 \$1,148.6 2.35% 0.71% 4.58% 73 Business and Professional Services except medicinal \$475,364.0 \$7,387.0 1 55% 730101 Miscellaneous repair shops \$23,195.3 \$291.3 1.26% 0.18% 730102 Services to dwellings and other buildings \$16,327.1 \$179.8 1.10% 0.11% 730103 Personnel supply services \$20,551.3 \$189.6 0.92% 0.12% 730104 Computer and data processing services \$60,821.4 \$1,570.6 2.58% 0.97% 730105 Mgmt and consulting serv., testing & res. labs \$64,467.9 \$1,086.2 1.68% 0.67% 730106 Detective and protective services \$9,464.4 \$210.7 2.23% 0.13% 730107 Miscellaneous equipment rental and leasing \$28,587.6 \$327.6 1.15% 0.20% 730108 Photofinishing labs and commercial photo 1 44% \$12,843.4 \$185.0 0.11% 2.06% 0.58% 730109 Other Business Services \$932.3 \$45,290.6 730200 Advertising \$15,883.7 \$210.3 1.32% 0.13% 730301 Legal Services \$76,890.0 \$1,301.8 1.69% 0.81% 730302 Engineering, architectual, and surveying services \$60,153.9 \$512.0 0.85% 0.32% 730303 Accting, auditing & bkkping, & misc. bus. services \$40,887.3 \$390.0 0.95% 0.24% \$4,536.0 0.92% 2.82% 77 Health, educational, and soc serv & nonprofit orgs \$491,189.0 770100 Doctors and Dentists \$1.530.8 1.15% 0.95% \$133,505.7 0.44% 770200 Hospitals \$136,581.3 \$715.2 0.52% 0.11% 770301 Nurshing and personal care facilities \$29,720.7 \$170.1 0.57% 770302 Other medical & health services, incl vet. \$38,703.4 \$357.8 0.92% 0.22% 770401 Elementary and secondary schools \$10,851.2 \$68.0 0.63% 0.04% 770402 Colleges, universities, and professional schools \$30,508.5 \$294.6 0.97% 0.18% 770403 Private libraries, voc. schools, and ed. serv \$8,914.7 \$149.1 1.67% 0.09% 770501 Business assoc. and prof. membership orgs \$10,454.7 \$78.2 0.75% 0.05% 770502 Labor orgs, civic, social, and fraternal assoc. \$12,584.1 \$150.7 1 20% 0.09% 770503 Religious organizations \$23,610.0 \$194.7 0.82% 0.12% 770504 Other membership organizations \$12,291.4 \$136.3 1.11% 0.08% 770600 Job training and related services \$4,613.1 \$26.8 0.58% 0.02% 770700 Child Day Care services \$140.8 1.09% 0.09% \$12,884.5 770800 Residential care \$9,095.3 \$97.4 1.07% 0.06% 770900 Social Services \$16,870.7 \$425.1 2.52% 0.26%

											Reside	nce Da	y Rates	s for 10	Minute	e calls											
	5	Mile C	all	16	Mile C	all	39	Mile C	all	90	Mile C	all	200) Mile (Call	33	4 Mile (Call	678	3 Mile (Call	141	8 Mile	Call	245	5 Mile	Call
	AT&T	MCI	Sprint	AT&T	MCI	Sprint	-	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint
1980	\$1.01			\$1.41			\$2.35			\$3.15	\$2.37	\$2.30	\$3.54	\$2.58	\$2.50	\$3.74	\$2.81	\$2.70	\$3.77	\$3.22	\$2.90	\$3.97	\$3.61	\$3.20	\$4.17	\$3.82	\$3.30
1981	1.13			1.63			2.77			3.67	3.07	2.67	4.07	3.39	2.90	4.36	3.62	3.13	4.39	3.66	3.36	4.60	3.84	3.71	4.80	4.00	3.83
1982	1.76	\$1.53	\$1.53	2.38	\$1.54	\$1.55	3.00	\$1.94	\$1.92	3.90	3.28	3.27	4.09	3.42	3.43	4.37	3.63	3.62	4.49	3.74	3.74	4.60	3.84	3.85	5.15	4.32	4.32
1983	1.76	1.54	1.54	2.38	2.10	2.09	3.00	2.70	2.69	3.90	3.28	3.29	4.09	3.42	3.43	4.37	3.63	3.62	4.49	3.74	3.74	4.60	3.84	3.83	5.15	4.32	4.32
1984	1.65	1.48	1.62	2.27	1.96	2.19	2.79	2.56	2.76	3.69	3.33	3.49	3.87	3.48	3.63	4.06	3.72	3.80	4.18	3.84	3.98	4.29	3.96	4.06	4.83	4.47	4.67
1985	1.98	1.80	1.70	2.59	2.33	2.00	3.00	2.82	2.20	3.48	3.29	3.34	3.66	3.48	3.45	3.85	3.72	3.63	3.97	3.84	3.70	4.07	3.96	3.80	4.43	4.28	4.10
1986	1.75	1.67	1.61	2.26	2.12	2.11	2.57	2.47	2.46	2.95	2.85	2.84	3.14	3.04	3.03	3.33	3.25	3.24	3.44	3.35	3.34	3.54	3.46	3.45	3.79	3.68	3.67
1987	1.48	1.45	1.46	1.89	1.85	1.86	2.09	2.04	2.06	2.38	2.32	2.34	2.56	2.51	2.52	2.75	2.70	2.70	2.95	2.90	2.92	2.96	2.91	2.93	3.08	3.04	3.04
1988	1.47	1.44	1.44	1.78	1.75	1.76	1.98	1.94	1.94	2.16	2.12	2.13	2.34	2.40	2.40	2.43	2.50	2.50	2.64	2.69	2.71	2.64	2.71	2.73	2.75	2.84	2.84
1989	1.71	1.70	1.70	2.01	2.00	2.00	2.21	2.15	2.20	2.21	2.15	2.20	2.30	2.15	2.25	2.31	2.15	2.30	2.40	2.35	2.35	2.50	2.45	2.45	2.50	2.45	2.45
1990	1.71	1.70	1.71	1.97	1.90	1.90	1.97	1.90	1.90	2.15	2.10	2.10	2.15	2.10	2.10	2.30	2.10	2.30	2.39	2.30	2.30	2.49	2.40	2.40	2.49	2.40	2.40
1991	1.70	1.70	1.71	1.80	1.80	1.80	1.90	1.90	1.90	2.10	2.10	2.10	2.10	2.10	2.10	2.30	2.30	2.30	2.30	2.30	2.30	2.44	2.40	2.40	2.45	2.40	2.40
1992	2.00	1.99	2.00	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.10	2.10	2.30	2.29	2.30	2.30	2.30	2.30	2.40	2.39	2.40	2.50	2.50	2.40
1993	2.20	2.20	2.20	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.50	2.50	2.50	2.50	2.50	2.50
1994	2.40	2.40	2.40	2.40	2.40	2.40	2.50	2.50	2.50	2.60	2.60	2.60	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.80	2.80	2.80
1995	2.40	2.40	2.40	2.40	2.40	2.40	2.50	2.50	2.50	2.60	2.60	2.60	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.80	2.80	2.80
1996	2.60	2.60	2.60	2.80	2.70	2.70	2.80	2.80	2.80	2.80	2.80	2.80	2.90	2.80	2.90	3.00	2.90	2.90	3.00	2.90	3.00	3.00	2.90	3.00	3.10	3.10	3.10
											Percer	t Char	iges fro	m 198	6 to 199	96											
	49%	55%	61%	24%	27%	28%	9%	13%	14%	-5%	-2%	-1%	-8%	-8%	-4%	-10%	-11%	-10%	-13%	-13%	-10%	-15%	-16%	-13%	-18%	-16%	-16%

								Reside	nce Ev	ening F	Rates fo	r 10 M	nute ca	alls													
	5	Mile Ca	all	16	Mile C	all	39	Mile C	all	90	Mile C	all	200) Mile (Call	334	4 Mile C	Call	678	3 Mile (Call	141	8 Mile	Call	245	5 Mile (Call
	AT&T	MCI	Sprint		MCI	Sprint		MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint
1980	\$0.65			\$0.91			\$1.52			\$2.04	\$0.71	\$0.92	\$2.30	\$0.77	\$1.00	\$2.43	\$0.84	\$1.08	\$2.45	\$0.97	\$1.16	\$2.58	\$1.08	\$1.28	\$2.71	\$1.15	\$1.32
1981	0.73			1.05			1.80			2.38	1.41	1.07	2.64	1.57	1.16	2.83	1.68	1.25	2.85	1.69	1.35	2.98	1.77	1.48	3.11	1.85	1.53
1982	1.05	\$0.65	\$0.61	1.42	\$0.89	\$0.84	1.80	\$1.12	\$1.05	2.33	1.46	1.39	2.45	1.45	1.44	2.62	1.65	1.54	2.69	1.69	1.60	2.76	1.73	1.63	3.09	1.93	1.82
1983	1.05	0.92	0.89	1.42	1.26	1.19	1.80	1.39	1.30	2.33	1.61	1.59	2.45	1.70	1.68	2.62	1.81	1.72	2.69	1.86	1.80	2.76	1.91	1.82	3.09	2.13	1.99
1984	0.99	0.90	0.97	1.36	1.21	1.31	1.67	1.55	1.65	2.21	2.05	2.09	2.32	2.19	2.23	2.43	2.25	2.33	2.50	2.40	2.43	2.57	2.47	2.49	2.89	2.73	2.69
1985	1.18	1.10	1.12	1.55	1.44	1.32	1.80	1.71	1.45	2.08	1.98	2.05	2.19	2.09	2.13	2.31	2.14	2.25	2.38	2.32	2.30	2.44	2.40	2.36	2.65	2.59	2.56
1986	1.05	0.99	0.98	1.35	1.29	1.28	1.54	1.48	1.46	1.77	1.70	1.68	1.88	1.80	1.79	1.99	1.91	1.90	2.06	2.03	2.02	2.12	2.09	2.08	2.27	2.24	2.23
1987	0.91	0.86	0.90	1.17	1.10	1.16	1.29	1.25	1.28	1.47	1.43	1.45	1.58	1.44	1.56	1.70	1.45	1.68	1.82	1.80	1.81	1.83	1.81	1.82	1.90	1.89	1.89
1988	0.98	0.86	0.90	1.19	1.08	1.15	1.32	1.24	1.28	1.44	1.37	1.40	1.56	1.44	1.56	1.62	1.44	1.63	1.76	1.75	1.77	1.76	1.77	1.78	1.84	1.85	1.86
1989	1.14	1.12	1.12	1.34	1.31	1.32	1.48	0.92	1.45	1.48	1.45	1.45	1.54	1.45	1.45	1.54	1.52	1.52	1.60	1.55	1.55	1.67	1.55	1.55	1.67	1.55	1.55
1990	1.14	1.12	1.12	1.34	1.30	1.30	1.45	1.38	1.40	1.45	1.38	1.40	1.45	1.38	1.40	1.45	1.40	1.40	1.49	1.40	1.40	1.49	1.40	1.40	1.49	1.40	1.40
1991	1.11	1.10	1.11	1.30	1.30	1.30	1.30	1.30	1.30	1.45	1.35	1.40	1.45	1.35	1.40	1.45	1.35	1.40	1.49	1.40	1.40	1.79	1.40	1.40	1.49	1.40	1.40
1992	1.30	1.30	1.30	1.40	1.34	1.40	1.40	1.34	1.40	1.40	1.34	1.40	1.40	1.35	1.40	1.40	1.35	1.40	1.40	1.40	1.40	1.50	1.48	1.50	1.50	1.48	1.50
1993	1.20	1.20	1.20	1.30	1.30	1.30	1.30	1.30	1.30	1.40	1.40	1.40	1.50	1.48	1.50	1.50	1.48	1.50	1.50	1.48	1.50	1.50	1.49	1.50	1.50	1.49	1.50
1994	1.40	1.40	1.40	1.40	1.40	1.40	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
1995	1.40	1.40	1.40	1.40	1.40	1.40	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
1996	1.40	1.40	1.40	1.60	1.60	1.60	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
								Percen	t Chan	ges fro	m 1986	to 199	6														
	33%	41%	43%	19%	24%	25%	10%	15%	16%	-4%	0%	1%	-10%	-6%	-5%	-5%	-1%	0%	-8%	-6%	-6%	-10%	-9%	-9%	-16%	-15%	-15%

									Reside	nce Ni	ght Rate	es for 1	0 Minu	te calls	3												
		5 Mile	Call		16 Mile	e Call		39 Mile	e Call		90 Mile	Call		200 M	ile Call		334 M	ile Call		678 M	ile Call	1418 N	∕lile Cal	I	2455 N	lile Cal	a l
	AT&T	MCI	Sprint		MCI	Sprint		MCI		AT&T		Sprint	AT&T	MCI				Sprint			Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint
1980	\$0.40			\$0.56			\$0.94			\$1.26	\$0.71	\$0.92	\$1.46	\$0.77	\$1.00	\$1.49	\$0.84	\$1.08	\$1.50	\$0.97	\$1.16	\$1.58	\$1.08	\$1.28	\$1.66	\$1.15	\$1.32
1981	0.45			0.65			1.10			1.46	1.01	1.07	1.62	1.12	1.16	1.74	1.21	1.25	1.75	1.21	1.35	1.84	1.27	1.48	1.92	1.33	1.53
1982	0.70	\$0.51	\$0.36	0.95	\$0.69	\$0.50	1.20	\$0.87	\$0.80	1.56	1.14	1.00	1.63	1.20	1.19	1.74	1.28	1.20	1.79	1.31	1.27	1.84	1.35	1.29	2.06	1.50	1.31
1983	0.70	0.61	0.59	0.95	0.84	0.79	1.20	1.08	0.99	1.56	1.25	1.20	1.63	1.32	1.30	1.74	1.41	1.33	1.67	1.45	1.40	1.84	1.48	1.48	2.06	1.66	1.56
1984	0.66	0.60	0.64	0.90	0.81	0.86	1.11	1.02	1.07	1.47	1.34	1.36	1.54	1.44	0.15	1.62	1.50	1.58	1.58	1.60	1.61	1.71	1.63	1.64	1.93	1.82	1.81
1985	0.79	0.73	0.92	1.03	0.96	1.05	1.20	1.14	1.15	1.39	1.32	1.36	1.46	1.39	1.45	1.54	1.44	1.52	1.51	1.55	1.56	1.62	1.60	1.59	1.77	1.71	1.73
1986	0.77	0.72	0.62	0.99	0.93	0.93	1.13	1.07	1.06	1.29	1.23	1.22	1.38	1.31	1.30	1.46	1.34	1.33	1.38	1.48	1.57	1.55	1.54	1.52	1.66	1.62	1.61
1987	0.69	0.67	0.68	0.88	0.87	0.86	0.98	0.95	0.95	1.11	1.09	1.04	1.20	1.18	1.04	1.29	1.27	1.05	1.26	1.37	1.37	1.39	1.37	1.38	1.44	1.42	1.43
1988	0.70	0.66	0.68	0.85	0.86	0.86	0.95	0.95	0.95	1.03	1.06	1.04	1.12	1.17	1.04	1.16	1.25	1.05	1.26	1.35	1.36	1.26	1.36	1.36	1.32	1.41	1.42
1989	0.97	0.92	0.85	1.10	1.05	0.95	1.20	1.15	1.05	1.20	1.15	1.15	1.21	1.15	1.15	1.22	1.15	1.15	1.26	1.22	1.22	1.30	1.25	1.25	1.32	1.25	1.25
1990	0.97	0.92	0.95	1.10	1.05	1.10	1.20	1.15	1.20	1.20	1.15	1.20	1.21	1.15	1.20	1.22	1.15	1.20	1.26	1.22	1.25	1.30	1.25	1.30	1.32	1.25	1.30
1991	1.05	1.00	1.00	1.13	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.22	1.20	1.20	1.25	1.20	1.20	1.30	1.30	1.30	1.33	1.30	1.30	1.35	1.30	1.30
1992	1.10	1.09	1.10	1.20	1.17	1.20	1.20	1.17	1.20	1.20	1.20	1.20	1.30	1.18	1.30	1.30	1.25	1.30	1.30	1.25	1.30	1.30	1.25	1.35	1.30	1.25	1.30
1993	1.10	1.10	1.10	1.20	1.17	1.20	1.20	1.17	1.20	1.20	1.17	1.20	1.30	1.18	1.30	1.30	1.29	1.30	1.30	1.29	1.30	1.30	1.29	1.30	1.30	1.29	1.30
1994	1.20	1.20	1.20	1.30	1.30	1.30	1.30	1.30	1.30	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.50	1.50	1.50
1995	1.20	1.20	1.20	1.30	1.30	1.30	1.30	1.30	1.30	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.50	1.50	1.50
1996	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
				I.					Percen	t Chan	ges froi	n 1986	to 199	96		l											
	69%	81%	109%	31%	39%	40%	15%	21%	22%	16%	22%	23%	9%	15%	15%	3%	12%	13%	16%	8%	2%	3%	4%	5%	-4%	-1%	-1%

	I										Rusine	ss Dav	Rates	for 10 I	Minute	calls											
	5	Mile C	ااد	16	Mile C	`all	30	Mile C	`all		Mile C) Mile (4 Mile (ااد	679	3 Mile (ااد	141	8 Mile	Call	245	5 Mile	Call
	AT&T		Sprint	l		Sprint						Sprint						Sprint									Sprint
1080	\$1.01	IVICI	Эрпп	\$1.41	IVICI	Spriit	\$2.35	IVICI	Эрпп			\$2.30						\$2.70									\$3.30
				l *			l '			* -	3.07	2.67		3.39	,	4.36	3.62			3.66		4.60	3.84	3 71	l '		
1981	1.13	64 50	#4 50	1.63	64 54	#4 FF	2.77	C4 O4	#4 00	3.67			4.07						4.39		3.36			•	4.80	4.00	3.83
1982	1.76		\$1.53		\$1.54		3.00			3.90	3.28	3.27	4.09	3.42			3.63	3.62	4.49	3.74	3.74	4.60	3.84	3.85	5.15	4.32	4.32
1983	1.76	1.54	1.54	2.38			3.00	2.70	2.69	3.90	3.28	3.29	4.09	3.42			3.63	3.62	4.49	3.74	3.74	4.60	3.84	3.83	5.15	4.32	4.32
1984		1.48	1.62	2.27	1.96	2.19	2.79	2.56	2.76	3.69	3.33	3.49	3.87	3.48		4.06	3.72	3.80	4.18	3.84	3.98	4.29	3.96	4.06	4.83	4.47	4.67
1985	1.98	1.80	1.70	2.59		2.00	3.00	2.82	2.20	3.48	3.29	3.34	3.66	3.48			3.72		3.97	3.84	3.70	4.07	3.96	3.80	4.43	4.28	4.10
1986	1.75	1.67	1.61	2.26	2.12	2.11	2.57	2.47	2.46	2.95	2.85	2.84	3.14	3.04	3.03	3.33	3.25	3.24	3.44	3.35	3.34	3.54	3.46	3.45	3.79	3.68	3.67
1987	1.48	1.45	1.46	1.89	1.85	1.86	2.09	2.04	2.06	2.38	2.32	2.34	2.56	2.51	2.52	2.75	2.70	2.70	2.95	2.90	2.92	2.96	2.91	2.93	3.08	3.04	3.04
1988	1.47	1.44	1.44	1.78	1.75	1.76	1.98	1.94	1.94	2.16	2.12	2.13	2.34	2.40	2.40	2.43	2.50	2.50	2.64	2.69	2.71	2.64	2.71	2.73	2.75	2.84	2.84
1989	1.71	1.70	1.70	2.01	2.00	2.00	2.21	2.15	2.20	2.21	2.15	2.20	2.30	2.15	2.25	2.31	2.15	2.30	2.40	2.35	2.35	2.50	2.45	2.45	2.50	2.45	2.45
1990	1.71	1.70	1.71	1.97	1.90	1.90	1.97	1.90	1.90	2.15	2.10	2.10	2.15	2.10	2.10	2.30	2.10	2.30	2.39	2.30	2.30	2.49	2.40	2.40	2.49	2.40	2.40
1991	1.70	1.70	1.71	1.80	1.80	1.80	1.90	1.90	1.90	2.10	2.10	2.10	2.10	2.10	2.10	2.30	2.30	2.30	2.30	2.30	2.30	2.44	2.40	2.40	2.45	2.40	2.40
1992	2.00	1.99	2.00	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.10	2.10	2.30	2.29	2.30	2.30	2.30	2.30	2.40	2.39	2.40	2.50	2.50	2.40
1993	2.20	2.27	2.27	2.20	2.27	2.27	2.20	2.27	2.27	2.40	2.45	2.45	2.40	2.45			2.51	2.51	2.40	2.51	2.51	2.58	2.62	2.62	2.58	2.63	2.63
1994	2.20	2.27	2.54	2.20	2.27	2.54	2.20	2.26	2.54	2.40	2.45	2.77	2.40	2.45		2.40	2.51	2.77	2.40	2.51	2.77	2.58	2.62	2.98	2.58	2.63	2.98
1995	_	2.61	2.72	2.82		2.72	2.82	2.61	2.72	3.04	2.82	2.94	3.04	2.82		3.04	2.82	2.94	3.04	2.80	2.94	3.19	2.95	3.08	3.19	2.95	3.08
1996	3.10		2.72	3.10		2.72	3.10	3.09	2.72	3.35	3.34	2.72	3.35	3.34	2.94	3.35	3.34	2.94	3.35	3.34	2.94	3.51	3.50	3.08	3.51	3.50	3.08
1990	5.10	5.09	2.12	3.10	5.09	2.12	5.10	5.09	2.12	0.55	5.54	2.12	5.55	5.54	2.34	0.00	5.54	2.34	5.55	5.54	2.34	5.51	5.50	5.00	0.51	5.50	5.00
									Percer	t Chan	ges fro	m 1986	to 199	96													
	77%	85%	69%	37%	46%	29%	21%	25%	11%	14%	17%	-4%	7%	10%	-3%	1%	3%	-9%	-3%	-0%	-12%	-1%	1%	-11%	-7%	-5%	-16%

^{*} Sprint has not offered basic "dial 1" MTS to new business customers since 7/30/95

											Busine	ss Nigh	t Rates	for 10	Minute	calls											
	5	Mile C	all	16	Mile C	all	39	Mile C	all	90	Mile C	all	200	Mile (Call	334	4 Mile (Call	678	3 Mile (Call	141	8 Mile (Call	245	5 Mile	Call
	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint	AT&T	MCI	Sprint
1980	\$0.40			\$0.56			\$0.94			\$1.26	\$0.71	\$0.92	\$1.46	\$0.77	\$1.00	\$1.49	\$0.84	\$1.08	\$1.50	\$0.97	\$1.16	\$1.58	\$1.08	\$1.28	\$1.66	\$1.15	\$1.32
1981	0.45			0.65			1.10			1.46	1.01	1.07	1.62	1.12	1.16	1.74	1.21	1.25	1.75	1.21	1.35	1.84	1.27	1.48	1.92	1.33	1.53
1982	0.70	\$0.51	\$0.36	0.95	\$0.69	\$0.50	1.20	\$0.87	\$0.80	1.56	1.14	1.00	1.63	1.20	1.19	1.74	1.28	1.20	1.79	1.31	1.27	1.84	1.35	1.29	2.06	1.50	1.31
1983	0.70	0.61	0.59	0.95	0.84	0.79	1.20	1.08	0.99	1.56	1.25	1.20	1.63	1.32	1.30	1.74	1.41	1.33	1.67	1.45	1.40	1.84	1.48	1.48	2.06	1.66	1.56
1984	0.66	0.60	0.64	0.90	0.81	0.86	1.11	1.02	1.07	1.47	1.34	1.36	1.54	1.44	0.15	1.62	1.50	1.58	1.58	1.60	1.61	1.71	1.63	1.64	1.93	1.82	1.81
1985	0.79	0.73	0.92	1.03	0.96	1.05	1.20	1.14	1.15	1.39	1.32	1.36	1.46	1.39	1.45	1.54	1.44	1.52	1.51	1.55	1.56	1.62	1.60	1.59	1.77	1.71	1.73
1986	0.77	0.72	0.62	0.99	0.93	0.93	1.13	1.07	1.06	1.29	1.23	1.22	1.38	1.31	1.30	1.46	1.34	1.33	1.38	1.48	1.57	1.55	1.54	1.52	1.66	1.62	1.61
1987	0.69	0.67	0.68	0.88	0.87	0.86	0.98	0.95	0.95	1.11	1.09	1.04	1.20	1.18	1.04	1.29	1.27	1.05	1.26	1.37	1.37	1.39	1.37	1.38	1.44	1.42	1.43
1988	0.70	0.66	0.68	0.85	0.86	0.86	0.95	0.95	0.95	1.03	1.06	1.04	1.12	1.17	1.04	1.16	1.25	1.05	1.26	1.35	1.36	1.26	1.36	1.36	1.32	1.41	1.42
1989	0.97	0.92	0.85	1.10	1.05	0.95	1.20	1.15	1.05	1.20	1.15	1.15	1.21	1.15	1.15	1.22	1.15	1.15	1.26	1.22	1.22	1.30	1.25	1.25	1.32	1.25	1.25
1990	0.97	0.92	0.95	1.10	1.05	1.10	1.20	1.15	1.20	1.20	1.15	1.20	1.21	1.15	1.20	1.22	1.15	1.20	1.26	1.22	1.25	1.30	1.25	1.30	1.32	1.25	1.30
1991	1.05	1.00	1.00	1.13	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.22	1.20	1.20	1.25	1.20	1.20	1.30	1.30	1.30	1.33	1.30	1.30	1.35	1.30	1.30
1992	1.10	1.09	1.10	1.20	1.17	1.20	1.20	1.17	1.20	1.20	1.20	1.20	1.30	1.18	1.30	1.30	1.25	1.30	1.30	1.25	1.30	1.30	1.25	1.35	1.30	1.25	1.30
1993	1.40	1.51	1.51	1.40	1.51	1.51	1.40	1.51	1.51	1.40	1.65	1.65	1.40	1.65	1.65	1.40	1.74	1.74	1.40	1.74	1.74	1.50	1.82	1.82	1.50	1.82	1.82
1994	1.40	1.51	1.62	1.40	1.51	1.62	1.40	1.51	1.62	1.40	1.65	1.73	1.40	1.65	1.73	1.40	1.74	1.73	1.40	1.74	1.73	1.50	1.82	1.85	1.50	1.82	1.85
1995	1.80	1.66	1.74	1.80	1.66	1.74	1.80	1.66	1.74	1.91	1.77	1.84	1.91	1.77	1.84	1.91	1.77	1.84	1.91	1.77	1.84	1.99	1.84	1.92	1.99	1.84	1.92
1996	1.98	1.97	1.74	1.98	1.97	1.74	1.98	1.97	1.74	2.10	2.09	1.84	2.10	2.09	1.84	2.10	2.09	1.84	2.10	2.09	1.84	2.19	2.18	1.92	2.19	2.18	1.92
									Percen	t Chan	ges fror	n 1986	to 199	6		ı											
	157%	173%	180%	100%	110%	87%	75%	83%	64%	63%	70%	51%	52%	59%	42%	44%	56%	38%	52%	41%	17%	41%	42%	26%	32%	35%	19%

^{*} Sprint has not offered basic "dial 1" MTS to new business customers since 7/30/95

Customer Response Survey

Publication: The Reference Book, March 1997

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis Division of the FCC's Common Carrier Bureau.

1.	Please check the category that best describes you:						
	presscurrent telecommunications carrierpotential telecommunications carrierbusiness customer evaluating vendors/service optionsconsultant, law firm, lobbyistother business customeracademic/studentresidential customerFCC employeeother federal government employeestate or local government employeeother (please specify)						
2.	Please rate the report:	Excellent	Good	Satisfacto	ry Poor	No opinion	
	Data accuracy Data presentation Timeliness of data Completeness of data Text clarity Completeness of text						
3.	Overall, how do you rate this report?	Excellent (_)	Good (_)	Satisfacto	ry Poor (_)	No opinion (_)	
4.	How can this report be improved?						
5.	May we contact you to discuss possible improvements? Name: Telephone #:						
	To discuss the information in this report, contact: Tracy Waldon or Jim Lande at 202-418-0940						
	Fax this response to:		OR		Mail this response to:		
(202) 418-0520					FCC/IAD Mail Stop 1600F Washington, DC 20554		